

ABSTRACTS

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Abstracts are arranged numerically by session and in the order of presentation within each session.

SESSION 5 (PAPER)

AGING AND TECHNOLOGY: FRIENDS

PROTOTYPE GOOGLE MAPS WEB SITE TO SELECT NURSING HOMES: USABILITY TESTING BY OLDER ADULTS

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The National Library of Medicine of the National Institutes of Health is developing a web site – called “Nursing Home Screener” (NHS) – for quick and convenient screening of U.S. nursing homes by the public. NHS incorporates Google Maps to display nursing home locations and quality ratings. Such applications of electronic maps are gaining in popularity, facilitated by increasing adoption of broadband Internet access. We report a usability study of a prototype NHS site conducted in April of 2008. The study took place at a health-related computer training class for older adults in a Maryland public library. Participants were ten adults between 57 and 83 years of age ($M=69.75$, $SD=7.87$) with little prior computer experience. Data were collected from interviews, surveys, and observation. Overall, participants felt positive about the information potentially available from NHS, yet less positive about the site’s navigation and information presentation. The map page was particularly puzzling to the majority of these older adults. Lack of knowledge and skills, age-related declines in vision and fine motor skills, prototype shortcomings, and the public library setting all contributed to participants’ difficulties in using NHS. Based on the test findings, we suggest design and training accommodations to facilitate older adults’ adoption and use of Web map applications. Specific simplifications, choice of controls, and alternative ways of presenting search results are proposed. These findings have been applied to a NHS redesign as it heads towards a beta release, and have implications for designing electronic maps for older adults beyond the nursing home domain.

THE RELATIONSHIP BETWEEN COMPUTER GAME CONTENT AND INTERACTION RELATIVE TO OLDER ADULTS

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The evolution of computer gaming since the 1960’s has significantly evolved forming an entertainment medium which for many is perceived as a young persons pastime and life style. Would older adults consider playing games with their children/grandchildren or within social networks given the current technology and game content? This study investigated the notion of game content and interaction in two phases, the first through a step-by-step approach of individuals designing their own game idea related to a hobby or interest, the second through playing three games from the sports genre on one of two consoles (Wii and PS2). Qualitative and quantitative data reported positive results from participants in both phase one and two. Examples of positive results from phase one included: 1) “The computer game for the elderly must encompass an exercise element and purpose;” 2) “I would like to play computer games to play with my grand-daughter;” 3) “If a game was of help to

any particular hobby I could be interested. Come a time when I am not very active, computer games could have a place in my life;” and 4) “I still think that playing games is educational and fun”. Results from participants in phase two have seen a significant response to game interaction and flow during game playing of the Nintendo Wii. The findings from this study indicate game content needs to be addressed further by the games industry and consideration of game design guidelines, to enable additional success, well-being and benefits towards older adults.

BRIGHTEN OUTCOMES: BRIDGING RESOURCES OF AN INTERDISCIPLINARY GERO-MENTAL HEALTH TEAM VIA ELECTRONIC NETWORKING TO IMPROVE PATIENT AND PROVIDER ACCESS TO MENTAL HEALTH CARE

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Introduction: The BRIGHTEN initiative seeks to address the growing problem of undiagnosed and untreated depression in older adults through use of an interdisciplinary “virtual team.” Methods: Older adults completed a three-item depression screen in primary and specialty care clinics. Those with depression symptoms were interviewed by the BRIGHTEN Project Coordinator. A summary of the interview was sent out electronically to the virtual team for discussion and recommendations for a treatment plan. The virtual team included a social worker, psychologist, psychiatrist, primary care physician, occupational and physical therapists and nutritionist. The Project Coordinator relayed the recommendations and developed a treatment plan with the participant. Three and 6-month outcome assessments were completed. Results: 660 older adults completed screening forms, 11% pursued further evaluation; 50% of those were African American or Hispanic. The nutritionist saw the greatest number of participants. Summary scores on the SF12 for mental-health and the GDS improved significantly between enrollment and 6-month follow-up. Discussion: The BRIGHTEN project has shown that (a) providing a mechanism for assessing and treating older adults with depression and anxiety in medical practices is a critical part of care, (b) health care providers not typically associated with depression management can play an effective role in treatment activities, and (c) virtual teams are an effective mechanism for provider communication and treatment planning.

TRAINING AND DEVELOPMENT IN GLOBAL PERSPECTIVE: INSIGHTS INTO AGING WORKFORCES

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As workforces age, the training and retraining practices of firms take on special importance to older workers thinking about recareering or further advancement within their current careers. From an organizational perspective, training and development of workers should lead to higher levels of organizational productivity, profitability, and innovation. However, little is known about the efficacy of various strategies for training, such as a focus on managerial or nonmanagerial workers or a focus on strengthening one training program as opposed to offering a larger variety of options, particularly the role that different age structures might

play. This paper attempts to address this gap, using the 2005 CRANET data, a survey of organizations around the world. When looking at developed economies, such as Australia, the United States, and the United Kingdom, we find that managerial and nonmanagerial workers tend to have equal access to low-cost training methods such as special tasks to stimulate learning, cross-organizational tasks, and project team work. However, higher cost methods such as networking and formal career plans are less frequently offered to nonmanagerial workers.

DIRECTION SENSE AND WAYFINDING IN MIDDLE AGE AND OLDER ADULTS: A VIRTUAL REALITY STUDY

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This study examined how gender affects place learning in older adults. Place learning, the ability to learn and remember environments is a critical cognitive function for wayfinding in new or changed environments that becomes impaired in many people with age. Some studies, conducted in humans and animals, have indicated that males are more effective at place learning tasks than females, yet there are some disparate findings. We hypothesized that men would learn environments faster and with less errors than women, and that this difference would occur in environments with different types of environmental cues. A virtual reality place learning task in which subjects were asked to find their way to a hidden target using extramaze cues was used to test this hypothesis in 131 healthy older men and women aged 55-96 years ($m=65$ years). Subjects were tested for 6 trials in 3 different cue conditions over 3 consecutive days. Results showed a significant difference in directional heading error (DHE) with respect to gender, with males having significantly less DHE ($F(1, 32)=7.95, p<.0001$), and showing a trend for a better learning curve over days ($F(2, 978)=2.92, p=.06$). Women still showed learning, but needed more time to learn. When questioned about their wayfinding strategy, more men than women used geometric information. Thus, older women are especially at risk for getting lost, and may need more time to learn environments. As women are the primary inhabitants of many senior environments, this lends important information to address, especially when environments are unfamiliar.

SESSION 10 (PAPER)

CHANGING MINDS OVER TIME

COGNITIVE CHANGES OVER TIME: A COMPARISON OF AFRICAN AMERICAN AND CAUCASIAN OLDER ADULTS

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Background: Studies suggest that African American (AA) elders have a higher prevalence of Alzheimer's disease (AD) and may experience patterns of cognitive changes that are different than their Caucasian (C) counterparts. The progression of AD in African American elders has not been established to the same extent that it has for Caucasian elders. Purpose: This study compares rates of cognitive change in African American and Caucasian elders with normal (N) cognitive function, mild cognitive impairment (MCI), or AD. Methods: The project includes an analysis of memory, language and executive functioning data from a five-year longitudinal study (baseline and four yearly follow-up visits) via the South Carolina Alzheimer's Disease Clinical Centers. Results: To date 100 (AA= 69, C = 31) participants have received a research diagnosis of N, MCI or AD. The median age and education are 73 and 12 years respectively. Although the two groups are generally similar, at baseline, the elders with AD varied significantly ($p=0.03$) on cognitive and functional ability with AA elders showing more impairment. Rates of cognitive change from baseline to year one will be presented at the meeting. Implications: Better understanding of the progression of Alzheimer's disease in the African American population is needed for proper diag-

nosis and treatment of the disease, ultimately minimizing the disparity in the quality of care available to African American elders.

BOTH OLFACTION AND APOE CONTRIBUTE TO DECLINE TRAJECTORIES IN NORMAL COGNITIVE AGING

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Research indicates that apolipoprotein E (ApoE) plays a role in the development of Alzheimer's disease (AD) and in the normal cognitive decline associated with primary aging. More recently, researchers have found that carriers of the $\epsilon 4$ allele associated with AD also display olfactory impairments. As a result, deficits in odor identification have been interpreted as a sign of pre-diagnostic AD. In the current analyses, we investigated the contribution of ApoE and olfactory ability in decline trajectories associated with normal cognitive aging, using longitudinal data on cognitive functioning available from the Swedish Adoption/Twin Study of Aging. Data on both ApoE status and olfactory functioning were available from 448 individuals ranging in age from 42 to 88 years at the first measurement occasion. Olfactory functioning was measured via mailed survey in 1990. Cognitive function was assessed in up to 5 waves of longitudinal data covering a period of 16 years. Latent growth curve analyses incorporating olfaction and ApoE status as covariates indicated that both variables contributed to the decline trajectories for cognitive function, although ApoE explained a larger proportion of variability in decline.

LOWER EDUCATION PREDICTS STEEPER TRAJECTORIES OF COGNITIVE DECLINE

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We investigated education as a predictor of dementia and cognitive decline using data from the NAS-NRC WWII Veteran Registry and Duke Twins Study of Memory in Aging ($N=6,352$). The modified Telephone Interview for Cognitive Status (TICS-m) was used to assess cognitive decline over 4 occasions. In the entire sample, not completing high school increased risk of dementia ($OR=1.53, 95\% CI 1.09, 2.15$). Not completing high school predicted, on average, 1.7 years earlier onset of dementia ($\beta=-1.68, p=.03$). In the non-demented sample, multiple-group latent growth curve models assessed changes in TICS-m comparing individuals with <12 years of education to those with 12+ years of education. Mean age at first and last occasion were 66 and 77 respectively. Of several models tested, the best fitting was a two-piece spline in which slope 1 was estimated between occasions 1, 2, & 3 and slope 2 was estimated separately between times 3 & 4. The model fit for both groups when mean levels of baseline TICS-m score were allowed to differ. Those with less education had nearly 5 points lower baseline scores than those with 12+ years. Improved fit in subsequent models ($\Delta\chi^2/df=20/2$) suggested the group with <12 years of school had a steeper decline ($M=-0.44$) between the first 3 occasions than did those completing 12+ years ($M=+0.13$), while the groups had similar declines between occasions 3 and 4. This suggests that education delays the onset of decline. Our results are consistent with the cognitive reserve hypothesis and demonstrate disparities for those with low education.

ACTIVITY PARTICIPATION PREDICTING 4-YEAR COGNITIVE CHANGE: A COMPARISON ACROSS MID AND OLDER ADULTHOOD, AND LOW, MEDIUM, AND HIGH EDUCATION

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There is strong empirical evidence in favour of the engagement hypothesis of cognitive aging, according to which active individuals attain and maintain better cognitive ability than their inactive peers. However, there is little information regarding whether the hypothesized benefits of lifestyle engagement are present in mid-life to the same degree as in late-life, and whether they vary according to educational achievement. The present study examined the differences across 2 groups of healthy adults (40-44 years at baseline; 60-64 years), and 3 levels of educational achievement (≤ 12 years; 13-15 years; ≥ 16 years) in whether baseline activity participation could predict 4-year cognitive change. 4541 participants from the PATH Through Life Project completed a range of cognitive tasks at baseline and follow-up, and reported their participation in 50 lifestyle activities over the past 6 months. Regression based models covarying for baseline cognitive test score, physical and mental health, sex, and occupational status were conducted for each Age X Education group. Those 60-64 years with low education had the greatest number of significant activity effects predicting 4-year cognitive change (e.g., processing speed, R^2 change = .015, $p < .001$), and greater activity participation was associated with a higher cognitive score at follow-up. Activity effects were also present in the mid-life cohort and in high education groups, but the pattern of findings were inconsistent for these groups. Therefore, activity may confer the greatest benefit for older adults with low levels of education.

EARLY LIFE CHARACTERISTICS, PSYCHIATRIC HISTORY, AND COGNITIVE FUNCTION IN LATER LIFE

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Advocates of the life course perspective suggest that a history of psychiatric problems might be particularly detrimental for later life cognitive functioning among individuals whose early life characteristics (poor childhood health or low SES) place them at risk of experiencing cumulative disadvantage. While considerable attention has been paid to the relationship between later-life depression and cognitive function, the relationship between a history of psychiatric problems and cognitive function or decline in later life is not very well documented. Previous studies of relationships between childhood health, childhood disadvantage, and cognitive function in later life explore different facets of this relationship using a variety of datasets. Very few consider both childhood health and SES, include measures for psychiatric history, or use nationally representative longitudinal data. This study explores the relationships between childhood health and SES, psychiatric history, and cognitive function in later life using six waves of the Health and Retirement Study (HRS). Growth curve models are used to analyze these relationships, controlling for demographics, health behavior, and health status. Findings indicate that at age 65, individuals with a history of psychiatric problems show lower cognitive scores and steeper declines in cognitive function as they age. Childhood health appears to be unrelated to cognitive function in later life. Sex and race/ethnicity do not interact with psychiatric history. Race interacts with childhood disadvantage to affect cognitive function at age 65, but does not affect cognitive decline. These effects are partially mediated by later-life demographic, socioeconomic, or health characteristics.

SESSION 15 (PAPER)

DEMOGRAPHIC PERSPECTIVES ON AGING

HYPERTENSION PREVALENCE AND HOUSEHOLD INCOME AMONG OLDER US AND CANADIAN ADULTS

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Hypertension is one of the most common chronic conditions worldwide. There is strong evidence that low socioeconomic status is associated with elevated rates of blood pressure-related cardiovascular disease. Few studies have examined the association between socioeconomic circumstances and hypertension among people aged 65 years and older. The purpose of this study was to examine the relationship between household income and hypertension prevalence among elderly persons in the United States and Canada. Data were obtained 755 Canadian and 1,151 US adults aged 65 and older from the 2002-03 Joint Canada/United States Survey of Health. Aggregate hypertension prevalence rates in the United States and Canada were generally similar (52.6% versus 48.3%, $p = .09$). In the United States, lower income older adults were 1.27 times more likely (95% confidence interval 1.07 to 1.50) more likely to report hypertension than their higher income counterparts; however, there was no evidence of a gradient in the association between income and hypertension in Canada. The results demonstrate that in Canada, unlike the United States, the burden of hypertension is approximately equal for socioeconomically advantaged and disadvantaged older adults. It is important to consider these findings in the context of long-term and broader institutional policies. Social disparities in health care access and primary prevention across the age span in the United States may play a role in the higher hypertension prevalence rate among low income older adults.

TRENDS IN THE ABILITY TO WORK AMONG THE OLDER US WORKING POPULATION, 1997-2007

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Even before the current economic situation, the issue of the ability of older workers to continue working was a major economic issue. Eligibility for full Social Security benefits is being increased to age 67, with periodic calls to raise it to age 70. In prior work ten years ago, Crimmins and colleagues examined this issue, concluding in 1999 that workers in their 60s improved in the ability to work, enough to justify age 67 for full retirement. Because of the current economic crisis, and the imminence of the baby boomers' retirement, we re-examine trends in self-reported work disability, using the National Health Interview Surveys between 1997 and 2007, separately for men and women. Findings indicate that men's reported work disability continued to decline in the ages between 62 and 69, while women's declined only during ages 67 to 69. When examining socioeconomic subgroups, we find that men's improvement was primarily in Hispanic men between ages 60 and 64, and in nonHispanic White men at ages 65-66; among highly educated men, and those in the lowest quartile of income. In contrast, women's improvements in work disability were primarily for NonHispanic Black and White women in their late 60s, with the exception of some improvement for nonHispanic Black and Hispanic women in their early 60s. Further research needs to be done to further refine these results and examine other factors driving these minimal improvements in work disability.

OPERATIONALIZING AND MEASURING THE THIRD AGE: RACE AND GENDER DIFFERENCES IN THIRD AGE LIFE EXPECTANCY (TALE)

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In this presentation, we demonstrate a new approach for calculating the amount of time people can expect to spend in the third age. Extending methods used to calculate active life expectancy, third age life expectancy (TALE) measures the number of years individuals can expect to spend in the third age, and thus, the amount of time they can expect to spend in a period of probable productive engagement. We operationalize the third age in three different ways using measures of health and employment status to explore how much time people can expect to spend in this life stage by race and gender. Results suggest that different conceptualizations of the third age shape the amount of time people can expect to spend in this period across different social groups. For example, measured as a state when an individual works 20 hours per week or less and has no activities of daily living (ADL) disabilities, the proportion of remaining life lived in the third age declines for black women much earlier than for other groups with white men experiencing the latest decline. This suggests that onset of severe disability shortens the period of the third age for black women and allows white men to experience a third age similar to that described in the rhetoric surrounding this life stage. We discuss ramifications of differentially defining the third age for social policies aimed at increasing opportunities for older adults to meaningfully engage in productive roles.

LOCAL AREA CHARACTERISTICS AND HEALTH AT OLDER AGES

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Existing research on linkages between local area characteristics and health at older ages is limited, especially in settings such as Japan where population age structure is changing rapidly and geographic variation in the pace of population aging is striking. Using data from the 1987, 1990 and 1993 waves of the National Survey of Japanese Elderly, we examine the extent to which health is associated with the demographic and economic characteristics of the place in which respondents reside. We consider five measures of health: self-rated health, satisfaction with health, health status relative to others of the same age, a seven-item CES-D index, and a five-item measure of difficulties with activities of daily living. Preliminary analysis indicate that respondents living in cities, villages, and towns with a relatively high proportion of the population aged 65+ report significantly worse health, controlling for age, sex, marital status, and educational attainment. For example, the relative odds of being in one of the two worst categories of self-rated health (not very good or poor) were 19% higher among those living in places with a high proportion (top quintile) of residents aged 65 and above. The magnitude of this relationship is similar to that of being unmarried. Subsequent analyses will examine ways in which a wider range of local area demographic and economic characteristics are related to change in health between surveys and trajectories of health across multiple survey waves.

DETECTING FUNCTIONAL DECLINES OVER THREE YEARS: A COMPARISON OF MEASURES

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This study compares the frequency of change over three years detected by four validated measures of function among community dwelling older adults. The four measures included the UAB Study of Aging Life-Space Assessment of mobility (LSA; range 0-120), Activities of Daily Living (ADLs; range 0-5), Instrumental Activities of Daily Living (IADLs; range 0-6) and the physical component score of the SF-12 (PCS; range 0-100). Baseline mobility status was categorized by LSA ≥ 60 and LSA < 60 . Baseline in-home and three-year follow-up tele-

phone assessments from the UAB Study of Aging were used to define decline in all measures (N=784). Mean age was 74.8 (54% female; 50% African American; 52% rural). 63% (N=493) had LSA ≥ 60 at baseline. Among persons with higher mobility (LSA ≥ 60), the percentage with any 3-year functional decline in LSA, PCS, IADL, and ADL was 66.1%, 40.2%, 28.4%, and 10.8%, respectively. In persons with LSA < 60 , functional declines were noted in 56.0%, 39.5%, 55.2%, 36.9%, respectively. When decline was defined as a 10-point decrease for LSA and PCS, functional decline was noted in 52.1% and 11.0%, respectively among those with LSA ≥ 60 . In those with LSA < 60 , decline was noted in 32.6% and 11.1%, respectively. All measures detected functional decline over three years regardless of baseline life-space mobility. However, LSA was more likely to detect functional decline in older adults with higher baseline mobility than the other three measures. This suggests that the LSA may be a particularly sensitive and appropriate measure for studies including higher functioning older adults.

SESSION 20 (PAPER)

FROM THE CRIB TO HEALTHY AGING: LIFECOURSE ISSUES

CHILDHOOD DISADVANTAGE AND HEALTH DECLINES OF CHINESE ELDERLY

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Numerous studies of health inequalities have documented an association between early life disadvantage and late life health. Little is known, in contrast, about the effects of early life disadvantage on the trajectory of later-life health decline over time. Moreover, much of the research on life course dynamics of health inequalities has been conducted within the context of developed countries. This paper investigates the influence of early life socioeconomic disadvantage on trajectories of health decline among Chinese oldest old. We use data representative of elderly Chinese 80-105 years old from a unique four-wave Chinese Longitudinal Healthy Longevity Survey (CLHLS, 1998-2005). We employ latent growth models—both standard growth curve models and growth mixture models—to examine variation in trajectories of later-life health over time and the effect of childhood covariates on the trajectories. Preliminary analyses indicate that childhood disadvantage was associated with significantly worse health among the oldest old. Respondents who were female, had no formal education, reported inadequate medical care in childhood, grew up in low-SES families, had more siblings, and did not have both parents when young reported worse self-rated health at the beginning of the survey. We found no evidence of health convergence over time, however. The trajectories of decline were not significantly related to any indicators of disadvantage, suggesting the influence of childhood conditions remained strong for the 7-year study duration. We discuss implications of these findings, comment on the limitations of the study, and suggest directions for future research.

DOES MILITARY SERVICE OFFSET THE EFFECT OF CHILDHOOD SES DISADVANTAGE ON MEN'S LATER LIFE PHYSICAL FUNCTIONING?

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No research has examined whether the effect of childhood socioeconomic (SES) disadvantage on men's later life physical functioning is moderated by military service status. Military service can offset such disadvantage by improving: access to education and job training; marital prospects, social status, and integration; and access to health care. This study uses 1992–2004 HRS data to examine whether the effect of childhood SES disadvantage on older men's activities of daily living (ADL) limitations differs among nonveterans, veterans with war service (WWII, Korea, Vietnam), and veterans without war service. Child-

hood SES disadvantage is measured by paternal and maternal education, paternal occupational prestige, and family-of-origin financial status. Controls include demographic characteristics and mid- to later-life socioeconomic and health statuses. Growth curve models estimate differences in men's age-related trajectories of ADL limitations. Results indicate that childhood SES disadvantage is related to higher ADL limitations and a steeper age-related increase in ADL limitations. Compared to nonveterans, veterans with wartime service have significantly higher ADL limitations, which are partly explained by their poorer overall health, but have similar age-related increases in ADL limitations. In contrast, compared to nonveterans, veterans without wartime service have an ADL limitation trajectory that does not increase as rapidly with age. The effect of childhood SES disadvantage on ADL limitations is offset for veterans with and without wartime service such that men from disadvantaged backgrounds who served in the military have better physical functioning than comparable men who did not serve in the military.

SELECTION INTO OLD AGE - CHILDHOOD ADVERSITY, SOCIAL CLASS IN ADULTHOOD AND EARLY DEATH

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Research has shown associations between living conditions throughout the life course and subsequent mortality. Individuals exposed to social and economic adversity have higher mortality risk. This study examined the association between childhood living conditions, social class in adulthood and the risk of early death (i.e., dying before the age of 75). Two questions were addressed: Is there an association between childhood living conditions and early death and if so, is the association mediated or modified by social class in adulthood? The questions were explored using the Swedish Level of Living Survey from 1968. Mortality information for 1968 – 2006 was gathered from registry data. Childhood living conditions were assessed using self-reports of social and economic conditions in the household during childhood. Results from multivariate analyses showed independent associations between living in a broken home (i.e., losing at least one biological parent), father's social class, social class in adulthood and early death. Exposure to a broken home during childhood, having a father classified as a manual worker and/or being classified as a manual worker in adulthood was associated with an increased risk of early death. There seemed to be no modifying effect of adult social class on the association between childhood conditions and early death. However, the results suggest that some of the effect of father's social class is mediated through own social class in adulthood. These results suggest a substantial impact of social and economic adversity during both childhood and adulthood on the risk of premature mortality.

CHILDHOOD SOCIAL AND ECONOMIC CIRCUMSTANCES AND OLDER ADULT HEALTH: FINDINGS FROM A DIVERSE SAMPLE

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Childhood social and economic circumstances ('childhood circumstances') are important for older adults' health. Research has documented associations between childhood socioeconomic status (SES), a subset of childhood circumstances, and adult health. Traditional measures of childhood SES such as father's occupation or educational attainment limit our ability to explore mechanisms by which childhood SES affects health. Using a conceptual framework resulting from qualitative research, we developed a retrospective survey to measure childhood circumstances. We interviewed 400 racially/ethnically diverse community-dwelling participants aged 55 and older (mean age=67 years); 61%

women. Retrospective assessments measured household composition, perception of quality of schooling, extracurricular activities, and adult encouragement and discouragement during the childhood/teen years (ages 5-18). Using backward elimination regression models, we investigated the extent to which childhood circumstances were independently associated with current health. For self-rated health (1-5, 5 is best), key childhood circumstance predictors included growing up with two parents (vs. not) ($B=0.36$; $p=0.002$), perception of school as a way to get ahead ($B=0.15$; $p=0.02$), and participation in high school extracurricular activities ($B=0.048$; $p=0.03$). For physical functioning (0-100, higher is better), key salutary childhood circumstances were growing up with two parents ($B=7.94$; $p=0.01$), perception of school as a way to get ahead ($B=6.64$; $p=0.0001$), and high school extracurricular activities ($B=1.10$; $p=0.05$); adult discouragement was associated with worse functioning ($B=-1.12$; $p=0.03$). Adjusting for race/ethnicity or father's educational attainment did not attenuate these results. Measures of childhood family, school, and social circumstances are promising additions to traditional childhood SES measures for understanding older adult health.

SESSION 25 (PAPER)

GENDER MODELS AND ISSUES IN LATER LIFE

HEALTH AND IDENTITY OF RURAL OLDER WOMEN

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The majority of older women have at least one chronic health problem and coping with multiple conditions is common with advancing old age. How women perceive threats to their health may influence their beliefs about themselves and ability to cope with health-related changes. In this longitudinal, qualitative study we explored the health perceptions of older rural women ($n = 36$) with multiple chronic conditions. Guided by a symbolic interactionist perspective, our research questions asked (a) How do rural older women with chronic health conditions define health in general, and their own health in particular? and (b) How do they talk about their health with others? We found that women depended on their embodied self, or signs from the body, to interpret their everyday health, that is, how they felt on a given day. Moreover, perceptions of everyday health and beliefs about various selves (e.g., an aging self, an embodied self, and continuity of selves developed earlier in life), rather than presence of an illness, accounted for women's assessment of their own health. It was not until functional limitations challenged salient identities that women began to incorporate the presence of a chronic health condition into their identities. The women engaged in identity management to make sense of limitations caused by their chronic health conditions. They regulated how much and with whom they were willing to share issues related to their everyday health. Findings suggest that the meaning of health for rural older women with chronic health conditions is context dependent.

GENDER DIFFERENCES IN THE LIFE EXPERIENCES OF JAILED OLDER ADULTS

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Women and older adults are the fastest growing population within the U.S. criminal justice system. Prior research studies tends to focus on aging imprisoned men ignoring older offenders in local jails and female older offenders; both groups of offenders with traditionally different criminal histories and individual circumstances. The goal of this preliminary study was to use chi square and regression analyses to explore life course variables such as childhood, adolescent, and adult experiences, and criminal history, as well as socio-demographics to understand the life experiences of older jailed women and men. These gender ($n=84$ women; $n= 246$ men) differences were examined using data from the 2002 wave of the Survey of Inmates in Local Jail (U.S.

Department of Justice, 2002). Chi square tests revealed significant gender differences in ethnicity, parental substance use, delinquent childhood friends, regular adult alcohol use, employment status, physical or sexual abuse history, and mental illness history. A logistic regression significantly predicted women (as opposed to men) to more likely have delinquent childhood friends, regular alcohol use, employment, and less likely to have physical or sexual abuse histories. Our findings suggest the life course perspective is a valuable perspective for understanding the life experiences of older offenders. The findings also imply that interventions should target childhood friendships, as well as employment and alcohol as an adult. Attendees of this session will understand the different life experiences of jailed women and men, and thereby understand the type of interventions needed to enhance these individual's lives.

A BLUEPRINT FOR 'BEING A MAN' AS ATTESTED BY OLDER MEN

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The dominant blueprint of "being a man" in North American culture calls for masculinity performances that project emotional and physical toughness and avoid "sissy stuff." Are these also the masculinity standards that old men endorse? This study examines the masculinity norms that older men perceive as the manhood mandate. Survey data with 349 men (age 60 and older) and structural equation modeling provide evidence that old men uphold masculinity norms that are similar to younger men's, but older men reorder the priorities of manhood. Maintaining respect emerges as the primary masculinity directive, followed by a reaffirmation of the precept "be tough". The damaging "no sissy stuff" directive remains a social force but is held in much greater disfavor. Of particular interest is old men's continued description of themselves as "masculine" and "not feminine," even though they describe themselves in more expressive, compassionate terms and less in vocabularies of being dominant and forceful. We find that the old men perceive the standards of masculinity that script later life as having softened the edges. But, their self-presentations as men and backing of masculinity norms underscore that gender matters. There is no blurring of their sense of masculinity. The importance of old men continuing to champion many aspects of the traditional standards of masculinity and to "do gender" is discussed in terms of the ways they do volunteer work, care work, and engage one another as men, rather than as their bodies reveal them to be, as old men.

THE EMERGENT DEPARTMENT CHAIR: BUILDING SUCCESS ONE INDIVIDUAL AT A TIME

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Women have consistently comprised a greater proportion of geriatric fellows than other medical subspecialties, currently accounting for 58%. Women's rate of advancing to program directorship has slowly progressed depending on specialty, ranging from 24% in family practice to 41% in internal medicine. While these percentages seem promising, there are no women directors in the Geriatric Research, Education and Clinical Centers (GRECCs), and women only represent 4% of prestigious full professorships. Examining clinical departments with new women chairs provides an opportunity to assess changing views toward women leaders in academic medicine, particularly in the context of assumptions about gender-linked traits and leadership skills, and to gain insights into characteristics a woman chair. This qualitative study employed textual analysis of 28 semi-structured interviews of male and female faculty members, as well as interviews and observations of their respective women chairs. We used a theoretical sampling strategy consistent with grounded theory methodology. Standard qualitative methods enhanced the validity of 4 emerging themes: 1) the prior environment; 2) the characteristics of the new chair: tough, direct, transparent; 3) the use of communal actions to "Shepherd one's vision into reality";

and 4) the ability to build power through consensus. Results indicated that these women leaders are building and maintaining the success of their departments in large part by connecting and supporting the individuals. Souba states that leadership development has become the "single most important organizational competency;" our three women chairs appear to have met all Souba's criteria for desirable physician leaders in academic medicine.

SESSION 30 (PAPER)

HEALTH PROMOTION PROGRAMS

NURSING ASSISTANTS PROVIDING MOUTH CARE TO NURSING HOME RESIDENTS WITH DEMENTIA: ACTUAL OBSERVATIONS

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Background: Almost 2 million older adults reside in nursing homes (NHs). The majority have some level of cognitive impairment and require assistance with routine daily activities such as dressing and brushing teeth. The number of older adults entering NHs with some or all of their own teeth has risen from 54% (1980s) to 70% (2000). Poor oral health has been linked to pneumonia, cardiovascular diseases, poor glycemic control, urinary tract infections, and weight loss. Purpose: to compare observed oral care provided by certified nursing assistants (CNAs) before and after an educational intervention. Setting: the dementia care units of two similarly sized NHs. One NH was located in an urban area and its primary reimbursement was Medicaid; the second NH was located in a suburban area and its primary reimbursement was private pay. Design: Quasi-experimental. CNAs observed prior to educational intervention (n=26) and 4 weeks after the educational intervention (n=19). The majority of CNAs were female and African-American. Data Analysis: Descriptive statistics and group comparisons using t-tests and chi-square analyses were used. Findings: Prior to the intervention, the majority of mouth care was provided by the CNA alone. Sponge toothettes were used 15% of the time. After the intervention, CNAs were more likely to allow the resident to perform his or her own care or to provide assistance. When residents were allowed to brush their own teeth, the average brushing time was 95.5 seconds; when CNAs brushed residents' teeth, the average brushing time was 52 seconds (significance = 0.022).

THE PRAISED PROGRAM: LESSONS LEARNED TO CHANGE HEALTH BEHAVIORS IN LOW INCOME OLDER ADULTS

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Despite clear guidelines and known benefits of cardiovascular disease (CVD) prevention behaviors, inactivity, high fat/high sodium diets, and poor adherence to medication regimens is prevalent among low income and African American older adults. A social-ecological model, addressing intrapersonal, interpersonal, institutional/organizational, environmental and policy factors, was used to develop and implement the People Reducing Risk and Improving Strength through Exercise, Diet and Drug Adherence (PRAISED) intervention. The intervention included three phases: Phase I Education Initiation Phase (week 1); Phase II Practice Phase (weeks 2-12); and Phase III Inoculation Phase (weeks 13-48). Combined education, motivation, and exercise classes were provided three times per week in Phases I and II, and once a month in Phase III. A total of 22 participants were recruited, the majority of whom were female (84%) and African American (86%). The mean age of participants was 76.4(SD=7.6). Class attendance was 60%, with 12

to 14 participants attending each class. At 4 months, there was a significant decrease in systolic ($p=.02$) and diastolic blood pressures ($p=.01$), and there were non-significant improvements in cholesterol intake ($p=.09$), in medication adherence ($p=.18$), and in overall mental health ($p=.11$). There was generally no or minimal change in self-efficacy and outcome expectations. This pilot work demonstrates the feasibility and potential effectiveness of the PRAISEDD intervention. Investigators will describe the successes and challenges of this pilot and how these are used to develop future plans using a randomized controlled trial design to determine intervention effectiveness and document change in cardiovascular risk profiles.

IMPLICATIONS OF RURAL RESIDENTS' MANAGEMENT OF MULTIPLE MORBIDITIES FOR DISEASE PREVENTION

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Context: Older adults often experience several simultaneously occurring chronic conditions, referred to as Multiple Morbidities (MM), and are living longer with these conditions. These conditions should be managed and, ideally, other conditions should be prevented. However, managing both MM and disease prevention may be overwhelming, particularly in vulnerable populations. **Purpose:** We sought to improve our understanding of the ways in which rural residents with MM engage in both disease management and prevention. **Methods:** Forty rural Appalachian residents age 50+ with an average of five chronic conditions participated in interviews about MM management and disease prevention. Transcripts were content analyzed and techniques were implemented to enhance transferability and rigor. **Findings:** Participants' medical visits appear to focus on chronic disease management, including discussing problems and managing medications, rather than on prevention. Yet, most reported compliance with certain preventative health practices, including cancer screening. Given this sample's frequent interaction with health care providers, the sizable number failing to meet screening recommendations and the inadequate understanding of prevention practices is alarming. **Implications:** We discuss strategies to increase disease prevention among this rural, vulnerable population burdened by MM.

THE RELATION OF HEALTH LITERACY TO HEALTH STATUS IN PARTICIPANTS 65 YEARS OF AGE AND OLDER IN THE NATIONAL ASSESSMENT OF ADULT LITERACY (NAAL)

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Health literacy has emerged as an important factor related to health in the elderly. Health literacy is linked to risk for hospitalization, health care utilization, poor diabetic control, and medication nonadherence. Low health literacy skills are an independent risk factor for mortality in elders. The reason for these relations is not clear but includes possible links to income, education, health-related behaviors, perceptual impairments, or access to health care. In this study we investigate the relation of health literacy to self-reported health status and explore the impact of possible explanatory variables on the observed relation in participants aged 65 years and older with data from the 2003 National Assessment of Adult Literacy (NAAL). Regression models using data drawn from 2,668 individuals selected to be representative of the population of the US aged 65 years or older evaluated the impact of explanatory variables on the relation of health literacy to self-reported health status. A model that included ethnicity, education, and income showed significant links between these variables and health status and reduced but did not eliminate the significant relation between health literacy and health status. Other variables, such as preventive health behaviors, access to medical insurance, reading habits, self-reported reading skills, perceptual status, physical activity, and computer use, were independent

predictors of health status but did not attenuate the still-significant relation between health literacy and health status. Health literacy may be a proxy for executive cognitive abilities that have been linked to health status and mortality in other studies with older persons.

SESSION 35 (PAPER)

HEALTHY AGING

THE GARDEN OF HEALTHY AGING: COLLABORATIVE PROJECT DEVELOPMENT IN THE VIRTUAL WORLD OF SECOND LIFE

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The population of older adults worldwide is growing exponentially, creating an increased concern to "add life to years" and great interest in the topic of healthy or successful aging. Learning ways to promote health and prevent decline as persons age is critically important, because the costs of decline and disability are significant for individuals, families, and society overall. New ways of educating older adults about health have emerged along with the growing interest in healthy aging. In particular, interactive health communication (IHC) has shown promising results in providing information on health and health conditions, promoting healthy behaviors, and providing information exchange and support. IHC consists of interactions between people and healthcare information that are mediated through electronic devices or communication technology such as the Internet. Among the most recently developed areas of IHC are the use of virtual environments such as Second Life®. Second Life® has been used by many healthcare organizations, including the Centers for Disease Control, to educate people about healthy behaviors. Second Life and other virtual environments enable participants to feel a sense of presence and of being immersed in the environment, which may lead to deeper learning. Additionally, learning can be customized to fit the needs of various users—a factor that is critical to the success of IHCs. This presentation will detail the process of developing and evaluating an exhibit on healthy aging in Second Life. Unique affordances of virtual worlds for IHC exhibits and strategies for creating and managing these exhibits will be discussed.

MAKING MEANING OF TURNING POINTS: RELATIONS TO VALUES, WISDOM, & LIFE SATISFACTION

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In the life review process, individuals engage in meaning making, and this often entails re-appraising events in their lives including turning points. This study examined older adults' appraisal of turning point events as being positive, negative, or neutral over time (then and now). Re-appraisal of turning points from positive to negative was hypothesized to be negatively associated with life satisfaction and wisdom, and positively associated with endorsement of self-enhancement values. Conversely, re-appraisal of turning points from negative to positive was hypothesized to be positively related to endorsement of self-transcendence values, wisdom, and life satisfaction. In a sample of 50 healthy older adults (65-96 years old), classical content analysis revealed that approximately half of the participants rated their turning point event as initially negative with significant re-appraisal from negative and neutral to positive over time. The majority of participants were also more likely to report themes of self-transcendence values in their life purpose as compared to themes of self-enhancement values. Independent t-tests also revealed that those individuals whose appraisal of their turning point changed from either neutral or negative to positive scored significantly higher on life satisfaction than those whose appraisal did not change. These results suggest that individuals who are able to overcome adversity and retell their life stories in a positive way are more likely to have higher life satisfaction and to illustrate gaining wisdom in their narra-

tives. In addition, there are indications that the passing of time allows individuals a wisdom advantage in their reflection process.

SELF-REGULATORY STRATEGIES AND WELL-BEING. RETAINING A SENSE OF MASTERY AND SATISFACTION IN OLD AGE

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It is well known that well-being remains stable in old and very old age despite numerous challenges, e.g. the loss of loved ones and physical decline, that turn the balance of gains and losses more and more negative. Several suggestions have been made to explain this paradoxical finding, mainly by the motivated use of specific self-regulatory strategies, e.g. downward social comparisons. The objective of our research was to explore the differential adaptiveness of self-regulatory strategies in old age and to identify variables that might play a moderating role between self-regulatory strategies and well-being. A total of $N = 133$ participants, $N = 41$ nursing home residents and $N = 92$ non-institutionalized individuals, aged between 65 and 98 years ($M = 76.02$, $SD = 7.35$) reported via questionnaire different facets of well-being (mastery, autonomy, life satisfaction, self-esteem, satisfaction with social relationships, self-reported cognitive and health status) and rated a current problem of their life situation (e.g. health, financial or living situation) with regard to various self-regulatory strategies (e.g. goal engagement, positive reappraisals). Factor analyses showed that self-regulatory strategies could partly be grouped into two broader categories that allowed for differentiation in problem- and emotion-focused coping. With gender, institutionalization and age as control variables, regression analyses and structural hierarchical modeling revealed distinct relationships between self-regulatory strategies and measures of well-being. In addition, we could identify several variables that moderated these relationships: The more individuals reported perceived self-changes and satisfaction with social relationships, the higher the impact of self-regulatory strategies on well-being.

THE MODERATING EFFECT OF PSYCHOLOGICAL RESOURCES ON THE RELATIONSHIP BETWEEN DECLINE IN HEALTH AND SELF-RATED HEALTH

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Decline in self-rated health (SRH) is an indicator of deterioration of health and well-being, predicting mortality and other functional outcomes. We examined the influence of psychological resources on decline in older adults' SRH in a large representative sample ($N=2034$) of older adults (65+ years) from the Australian Longitudinal Study of Ageing. We investigated whether depressive symptoms and locus of control moderated the relationship between change in physical and functional health and change in SRH ratings in two different SRH measures: global (overall health) and age-comparative (health compared to same aged peers). Ordinal latent growth models revealed an interaction between depressive symptoms and the relationship between change in health and global SRH ($OR=0.996$, $CI=0.99-0.999$), and an interaction between locus of control for age-comparative SRH ($OR=0.99$, $CI=0.98-0.999$). These interactions were in the reverse direction to the hypothesis that having positive psychological resources moderate the negative effects of health decline on SRH ratings, and indicate a limiting ceiling effect associated with change in SRH ratings. A significant age effect on the age-comparative SRH slope showed that for each year over 78 years (mean age wave 1) the odds of decline in ratings decreased by 1.16 ($p<.05$). These results suggest that the process of age-comparison may protect older adults' health evaluations regardless of health decline. Session participants will gain greater understanding of how older adults' percep-

tions of their own health relate to psychological resources and mental health.

SESSION 40 (PAPER)

LIVING LONG AND HEALTHY

STRESSORS OVER THE LIFE COURSE AND PHYSIOLOGICAL DYSREGULATION IN COSTA RICA

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Allostatic load (AL) theory purports that stress experienced over the life course exacts a cumulative, physiological toll on the body that eventually contributes to poor health. Although mounting evidence indicates that elevated levels of AL is a risk factor for poor health later in life, it is not yet clear whether those same elevated levels are due to stressor exposure. To better understand the connection between stressor exposure and AL levels, we analyze data from the Costa Rican Healthy Aging Study, a new, nationally representative survey of older Costa Rican men and women. This paper focuses on the relation between a variety of stressors experienced over the life course (e.g., economic deprivation early in life, death of children and years widowed) and four neuroendocrine markers analyzed in an index. None of the stressors examined were associated with riskier neuroendocrine biomarker profiles, suggesting that neuroendocrine system dysregulation stems from sources other than stressor exposure.

THE CUMULATIVE INFLUENCE OF SOCIOECONOMIC DISADVANTAGE ON TRAJECTORIES OF PHYSICAL LIMITATION, CHRONIC DISEASES, AND DEPRESSIVE SYMPTOMS IN LATE ADULTHOOD

K. Kwag, K. Wickrama, P. Martin, J. Lempers, *Iowa State University, Ames, Iowa*

The objective of this study was to explore the cumulative effects of socioeconomic disadvantage (old age, female, unmarried, minorities, and low socioeconomic status) on trajectories of physical limitation, chronic diseases, and depressive symptoms and the longitudinal cross-domain influences of health problems in late adulthood. This study used the data of the Health and Retirement Study (HRS) collected in 1998, 2000, 2002, 2004, and 2006. Variables are included ethnicity (non-Hispanic White, African American, and Hispanics), age category (young-old, old-old, and oldest-old), gender, marital status, education, occupational prestige, and household income, physical limitation, chronic diseases, and depressive symptoms. Results of this study demonstrated that disadvantages (old age, gender, unmarried, minorities, and low socioeconomic status) detrimentally affected the initial levels and progresses of multiple health problems. The association of the initial levels and the rates of change among multiple health problems one another. In specific, the initial level of chronic diseases positively influenced the progress of physical limitation and depressive symptoms. The initial level of physical limitation negatively influenced the progress of depressive symptoms. The initial levels physical limitation, chronic diseases, and depressive symptoms were negatively associated with the slopes of them, respectively. The initial levels and slopes of different health problem trajectories were positively correlated. The study demonstrated adverse effects of chronic stressors or disadvantages on a) severity (level) and b) changing disparities of health problems during late adulthood. The initial level of a specific health problem influenced the change in other health problems, supporting the process of stress-response proliferation over the life course.

GENETIC AND ENVIRONMENTAL INFLUENCES ON PULMONARY FUNCTION IN A MIDDLE-AGED TWIN COHORT

M.D. Grant¹, W. Kremen^{2,3}, C. Franz^{2,3}, M.S. Panizzon², R. Toomey¹, J. Karlinsky^{4,5}, R. Murray¹, M. Lyons¹, 1. *Psychology, Boston University, Boston, Massachusetts*, 2. *University of California, San Diego, San Diego, California*, 3. *Center for Behavioral Genomics, UCSD, San Diego, California*, 4. *Boston University School of Medicine, Boston, Massachusetts*, 5. *VA Boston Healthcare, Boston, Massachusetts*

Forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) decline with age and are associated with age-related morbidity and mortality (time to death). The purpose of this study was: (1) to estimate the genetic and environmental influences on the variation of FVC and FEV1, and (2) to examine the association among specific health variables with FVC and FEV1 in a middle-aged twin cohort. This analysis examined 1115 twin participants (278 identical twin pairs, 47 singletons; 235 fraternal twin pairs, 42 singletons) from the Vietnam Era Twin Study of Aging (VETSA). Mean age of the sample was 55.4±2.5 (range 51-60). Pulmonary function was measured by spirometry (MedGraphics SpiroCard) in accordance with current American Thoracic Society criteria. Average FVC and FEV1 were 4.8±1.3 and 3.7±.99, respectively. FVC and FEV1 were significantly ($p < .01$) correlated with age ($r = -.14$; $r = -.15$, respectively), grip strength ($r = .28$; $r = .24$, respectively), and 10 meter walk time ($r = -.19$; $r = -.16$, respectively). Significant mean differences for both FVC and FEV1 were seen by smoking status (256 current smokers). Genetic modeling revealed heritability estimates of .37 and .43 for FVC and FEV1, respectively. Non-shared (unique) environmental influences accounted for ~57% of the variance for both FVC and FEV1. Genetic factors accounted for a moderate proportion of variance in pulmonary function in this middle-aged twin cohort. FVC and FEV1 proved to be significantly associated with age, measures of physical functioning, and smoking status in this healthy middle-aged cohort.

EXCEPTIONAL LONGEVITY IN A LONG-TERM COSTA RICAN COHORT FOLLOW-UP

W.H. Dow¹, L. Rosero-Bixby², 1. *School of Public Health, UC-Berkeley, Berkeley, California*, 2. *University of Costa Rica, San Jose, Costa Rica*

Although Costa Rica is a middle-income country, with per capita income about one-fifth the level of the United States, vital statistics data indicate that life expectancy in the 1990's has been approximately equivalent to that of many developed countries. To further explore this apparently exceptional longevity we have recently completed the Costa Rican National Longitudinal Mortality Study (CR-NLMS) which tracks mortality events in a cohort of approximately 20,000 Costa Ricans drawn from the 1984 census. These are among the first comprehensive data of their type from a setting outside high-income countries. In this paper we first detail the methodology by which we link individuals to the Costa Rican National Death Index and validate our ability to comprehensively identify mortality events and thus accurately estimate mortality rates. Next we show that our data closely track aggregate mortality patterns from previously analyzed vital statistics data, further confirming Costa Rica's remarkably low mortality rates. We then estimate survival models to characterize socioeconomic patterns of mortality, prospectively analyzing mortality in relation to 1984 census characteristics. Prior research had found remarkably flat socioeconomic gradients in recent Costa Rican older adult mortality, which some had interpreted as providing evidence consistent with the hypothesis that Costa Rica's strong safety net and historically equitable society may have protected low SES individuals. Our new analyses with CR-NLMS are able to establish Costa Rica's mortality patterns much more definitively, increasing the confidence in lessons that can be drawn from this country's unique longevity accomplishments.

OLDER ADULTS' VIEWS ON EXTENDING THE HEALTHY LIFE SPAN

V.G. Cicirelli, *Psychological Sciences, Purdue University, West Lafayette, Indiana*

Numbers of centenarians (100-109) and supercentenarians (110-122) are increasing, providing an impetus for some anti-aging researchers to work toward extending the life span to age 150, and others (e.g., deGrey at Oxford) to work toward attaining life without death. This has led to conflict with pro-aging gerontologists who accept death and are concerned with consequences for society and behavior if the anti-aging researchers succeed. Yet the extent to which elders would welcome a healthy life extension is unknown. The aim of the present exploratory study was to examine elders' attitudes toward such possibilities and to identify related factors. The first participants of the ongoing study were 50 elders (21 men, 29 women) aged 60-86 ($M = 73.94$, $SD = 8.17$). Measures included attitudes toward Living Long (e.g., 150 years) and Living Forever, desired age, neutral death acceptance (Reker), and internality (Wallston's health locus of control). Attitudes were more positive toward living an extended life than toward living forever ($p < .01$). In structural analyses, more positive attitudes toward extending life were directly predicted by greater desired age ($\beta = .24$), less death acceptance ($\beta = -.43$), and greater internality ($\beta = .30$). Gender and education had indirect effects through their effect on desired age, with men and those with more education desiring to live to a more advanced age. Qualitative analyses explored elders' reasons and goals for an extended life. Elders are cautious about life without death but are more positive about increasing longevity in order to complete their goals.

SESSION 45 (SYMPOSIUM)

PERSONALITY DISORDERS IN DSM-V: ASSESSMENT CHALLENGES AND IMPLICATIONS FROM A LATER LIFE PERSPECTIVE

Chair: S. Balsis, *Psychology, Texas A & M, College Station, Texas*

Discussant: P.A. Lichtenberg, *Institute of Gerontology, Detroit, Michigan*

There is solid consensus among clinicians and researchers that the DSM diagnostic category of personality disorders (PDs) is severely flawed. Indeed, it has been argued that the DSM PD criteria have limited reliability, validity, and utility because they are measured categorically. This categorical system is problematic because it cannot reflect the actual nature of PD pathology, which is thought to exist along several associated dimensions. Given the limitations associated with the current categorical system, discussions surrounding its revision have focused almost exclusively on changes to more sound dimensional measurement. But there is another problem that looms. The DSM system dramatically mischaracterizes PDs in later life. The lack of attention to the mischaracterization of PDs in later life is remarkable, given that it likely influences clinicians' and researchers' abilities to conduct reliable and valid assessments on a large (and growing) segment of the population. The implications extend even further. For instance, serious questions can be raised about the viability of theories that rest on data linked to the current criteria. The aims of the presentations in this symposium are to illustrate the theoretical understanding of personality that is gained from closely considering the context of later life, to analyze specific measurement problems in any PD classification system that does not closely consider older adults, and to outline relevant guidelines to inform the development of DSM-V. Indeed, this topic is timely as conversations regarding revising DSM-IV currently are taking place and the expected publication of DSM-V is merely three years away.

ASSESSMENT OF PERSONALITY DISORDERS IN LATER LIFE: CONCEPTUAL AND THEORETICAL ISSUES

T.F. Oltmanns, *Psychology, Washington University, St. Louis, Missouri*

Serious questions remain unanswered regarding the trajectory of personality disorders in later life. Some personality disorders remit over time, but we do not know whether these problems re-emerge later (with either similar or modified presentations). I will present preliminary findings from a prospective, longitudinal study of the stability and impact of personality pathology in later life which is being conducted with a representative sample of 900 participants. The study is concerned with the extent to which personality and personality disorders influence the ability to adapt successfully to important life transitions. Nosological comparisons are being made between two different approaches to the definition of personality pathology: the approach represented in DSM-IV and the Five Factor Model of personality. Consideration is also being given to the incremental validity of informant reports (relative to self-report measures) of normal and pathological personality traits. Implications for DSM-V will be addressed.

ASSESSMENT OF PERSONALITY DISORDERS IN LATER LIFE: CLINICAL ISSUES AND STRATEGIES

D. Segal, *University of Colorado, Colorado Springs, Colorado*

This presentation will provide an overview of the major issues involved in the psychological assessment of PDs in later life. First, conceptual issues regarding the measurement of personality pathology in later life will be presented, including a critique of the current diagnostic criteria for personality disorders, followed by a discussion of general assessment strategies. Next, several popular self-report objective personality disorder instruments will be reviewed with emphasis on their application to and psychometric support with older adults. Semi-structured diagnostic interviews for personality disorders will be described next, also with as focus on their suitability to older adults. The presentation will conclude with a discussion of possible changes to be made in the DSM-V and description of a research agenda to improve the assessment of PDs in later life.

ASSESSMENT OF PERSONALITY DISORDERS IN LATER LIFE: EMPIRICAL AND PSYCHOMETRIC ISSUES

S. Balsis, L.D. Cooper, A.A. Unger, S.N. Wrenn, *Psychology, Texas A & M, College Station, Texas*

A growing body of evidence suggests that the DSM personality disorder diagnostic criteria contain measurement bias across age groups. Items such as, "Avoids occupational activities," cannot measure personality equally well in younger and older adults because the items focus on a younger occupational and social context. In this presentation we illustrate the extent of this measurement bias using two different samples ($n = 43,093$ and $n = 1109$). We also show how this measurement bias has cascading consequences on the criteria's psychometric properties, including negative consequences for various forms of reliability and validity. If the new version of DSM, which is slated for publication in 2012, does not closely consider the presentation of personality in later life, it may continue to be hampered by these psychometric issues. Recent discussions suggest that a leading dimensional model could replace Axis II and potentially address this type of measurement bias.

SESSION 50 (PAPER)

REAL AND SIMULATED AGING: USING COMPUTERS TO UNDERSTAND AGING

CREATING AN ONLINE COMMUNITY FOR ACTIVE AGING PROFESSIONALS: LESSONS LEARNED

A.M. DeMano, K. Turnbaugh, *Human Kinetics, Champaign, Illinois*

With an abundance of organizations, institutions, and professionals involved in active aging, staying up with advances in the field can be

daunting. To provide professionals and researchers with a forum for interacting and sharing information, Human Kinetics, in cooperation with the International Coalition for Aging and Physical Activity (ICAPA), created the Active Aging Community Center (AACC). This unique Web site was designed to be a central source for news and vital information on programming and research in the field of active aging. A Steering Committee of 20 international active aging leaders developed and continue to create content for the Web site; while international "reporters" regularly write about news and events in their areas. Another means to gather content comes from Grant-funded projects, as these initiatives are continually searching for methods to keep their content in the public eye. A project of this magnitude required seeking endorsement from and the cooperation of numerous national and international agencies, organizations, professionals and researchers with an interest in active aging. To remain current and comprehensive, the AACC relies heavily upon the timely and regular submissions of interested individuals. In addition, there were challenges associated with creating such an endeavor that had to be overcome. A few of these include the fact that content is gained solely from volunteer contributions, as well as that language could be a barrier to participation since this is an international site. In this presentation, participants will learn how they can create this type of online community to benefit other areas of gerontological health promotion.

AGE RELATED CHANGES IN EPISODIC SIMULATION OF HEALTH EVENTS

D. Korovikov, *Rutgers University, Millburn, New Jersey*

Our goal is to replicate Addis, Wong & Schacter's (2008) finding that narratives generated by younger adults contain more concrete, situation specific details and fewer abstract, non situational elements than narratives generated by elderly respondents in response to non health cues and test whether these differences extend to narratives generated to health relevant cues. Method: Tape recorded narratives of prior and anticipated experiences for 4 specific non-health cues and 8 health cues were obtained from 24 undergraduates and 12 elderly adults. The Autobiographical Interview system was used to identify episodic details intrinsic to the situation and abstract details extrinsic to the situation. Findings: Analysis of variance comparing narrative responses to non-health cues replicated prior findings. Significant differences between age groups in narrative responses were also found for medical cues. Specifically, younger and older adults produce same-length narratives but younger adults produce more episodic context-specific details whereas older adults produce more abstract and un-related details. Analyses also found that non-medical cues produce significantly more episodic narratives than medical cues. Lastly, acute medical cues result in specifically more episodic narratives than chronic medical cues. Discussion: Differences in accessing of abstract Vs situation specific information will be discussed in terms of life span factors affecting the use and/or avoidance of episodic content that is threatening. Implications for future studies and interventions intended to increase end of life planning among the elderly will also be discussed.

TECHNOLOGY AND AGING PROJECT: INITIAL LESSONS LEARNED FROM IMPLEMENTATION OF A TECHNOLOGY TRAINING PROGRAM FOR OLDER ADULTS

A.T. Woodward¹, P.P. Freddolino¹, C.M. Blaschke¹, M. Fox², D.J. Wishart², L. Bakk¹, 1. *School of Social Work, Michigan State University, East Lansing, Michigan*, 2. *Otsego County Commission on Aging, Gaylord, Michigan*

There is increasing evidence that use of information and communication technology (ICT) can improve the physical and mental health of older adults by enhancing social support and psychosocial well-being. Although rates of ICT use among older adults are increasing they are still below other age groups in the US. The absence of good training opportunities is one reason for this difference. The Technology and Aging

Project attempts to address this barrier by evaluating a training program in ICT use provided to adults aged 60 and older in a rural county in Northern Michigan. The study includes a total of 83 adults aged 60 and older at baseline. Forty-five were randomly assigned to an experimental group that participated in the training and 38 were assigned to a control group. Data were collected at baseline with additional data collection to take place at 3 months, 6 months, and a 9 month follow-up. Data include measures of loneliness, depression, social networks, perceived social support, and computer self-efficacy. On average, participants were high functioning reporting little loneliness or depression and having social networks from which they feel supported. Although results for computer self-efficacy were more mixed, the vast majority (86.8%) reported feeling comfortable learning new technology and most (63.9%) reported being very or somewhat knowledgeable about computers. In addition to describing the structure of the intervention, lessons learned about recruiting participants, assessing baseline knowledge, and providing training will be shared.

LONELINESS AMONG OLDER ADULTS: THE INFLUENCE OF COMPUTER USE AND OTHER CHARACTERISTICS

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Objectives: Loneliness adversely affects well-being and is associated with increased use of health services, greater risk of institutionalization, and poorer medical treatment outcomes among older persons. Research shows that technology can reduce feelings of loneliness but computer use (as a determinant or deterrent) has not been extensively studied. This study examined the association between computer use and loneliness. **Methods:** The sample included 6,008 community-dwelling adults aged 70 and over from the 2004 Health and Retirement Study. Hierarchical stepwise regression was used to investigate the relationship between loneliness and computer use along with other confounding factors. Sociodemographic, health, and social factors were also included in the model in a series of three sequential blocks. **Results:** Although health and social factors reduce its statistical effect, computer use was negatively associated with loneliness ($p < .001$) in all three models. In the full model, regular computer users were 40% less likely to feel lonely than their non-computer-using counterparts. **Discussion:** Since the costs of computers have declined dramatically and both the number of elder computer users and their proficiency levels are expected to rise, computers present a practical solution to combat loneliness for many older adults, especially those with social networks that are widely dispersed or compromised by disability, lack of transportation, and unsafe neighborhoods. This study suggests that older adults should acquire and maintain computer skills, firms in the computer industry should consider the needs of older persons and deem them a viable market, and senior services organizations should offer computer access and training.

THE SIMULATOR SICKNESS QUESTIONNAIRE AS A PREDICTOR OF SUBSEQUENT SIMULATOR SICKNESS

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Driving simulators provide a means to assess driving skills in a well-controlled environment. However, some people experience simulator sickness, which limits their ability to complete the simulated driving assessment (SDA). One strategy used to decrease simulator sickness (SS) is a short acclimation period prior to driving the full SDA. The Simulator Sickness Questionnaire (SSQ) is a widely accepted tool used to assess SS (Kennedy, et al., 1993). The purpose of this study was to: 1) examine if there are differences in post-acclimation SSQ scores between participants who did and did not complete the SDA, and 2) to establish a cut-off SSQ score to indicate if participants should proceed with the SDA. Participants (age = 57.3(20.6); 36 males and 27 females), completed the SSQ before and after a five-minute acclimation period. Of the 63 participants, 43 completed the subsequent SDA and 20 did

not (due to experiencing SS). There was a significant interaction ($F = 33.78, p < .001$) and main effect ($F = 19.20, p < .001$) between participants who did and did not complete the SDA, indicating that SSQ scores were similar at baseline, but became significantly greater post-acclimation among participants who did not complete the SDA. Receiver operating characteristic (ROC) curve analysis established a cutoff score of 13 (sensitivity = .85; specificity = .65; overall error = .50), above which a participant should not attempt the full SDA due to SS symptoms. The area under the curve was .82, indicating good discriminability between signal (correct prediction) and noise (incorrect prediction).

SESSION 55 (PAPER)

STAFF ISSUES IN NURSING HOMES

INFLUENCE OF STAFFING LEVELS ON PRESSURE ULCER MANAGEMENT IN NURSING HOMES

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Pressure ulcers continue to be a significant problem in long-term care facilities. Previous research has found that nearly 50% residents develop pressure ulcers during the terminal phase of illness. Complications can be serious, and patients with pressure ulcers often experience pain and a diminished quality of life. The purpose of this study was to explore the role of nurse staffing levels in the development and management of pressure ulcers. Data were obtained from two facilities: one with nurse staffing levels similar to the national average, and a second with RN staffing levels 1.5 times higher than the national average. Participant observation, in-depth interviews and event analysis were used to obtain data about the development and management of pressure ulcers in these nursing homes. Results indicate that the residents in the nursing home with higher levels of nurse staffing tended to identify pressure ulcers at earlier stages. In addition, the nursing assistants in the facility with higher levels of nurse staffing were less likely to report that they did not have adequate time to turn and reposition patients. The presence of a full-time wound care specialist contributed to improved monitoring and surveillance of pressure ulcers at the more richly staffed facility. Findings suggest that changes to facility level staffing patterns will improve pressure ulcer management and decrease the severity of pressure ulcers.

THE EFFECTS OF NURSING HOME CULTURE AND CLIMATE ON OUTCOMES FOR EMPLOYEES AND RESIDENTS

K. Cassie, *College of Social Work, University of Tennessee, Nashville, Tennessee*

Culture change movements in nursing homes across the country are gaining momentum, but much of the literature on the topic is theoretical, anecdotal, or reports on the efforts of a few facilities with limited statistical analysis. This research furthers our understanding of the organizational social context of nursing homes by examining the relationship between the organizational culture and climate of nursing homes and outcomes for employees and residents. It was hypothesized that in nursing homes with more positive organizational cultures and climates, we expected to find: 1) better employee morale; 2) better resident health; and 3) better resident psychosocial health. Data was obtained from a sample of 27 nursing homes in a single southeastern state, 1,114 employees and 3,927 residents. Organizational culture and climate were measured by the Organizational Social Context (OSC) system. Resident health and psychosocial outcomes were measured by the Minimum Data Set (MDS). Hierarchical Linear Modeling (HLM) was used to examine hypotheses. Findings revealed partial support for the proposed hypothesis in that climate was associated with greater employee morale, improved resident health and improved resident psychosocial conditions. Definitions of culture and climate based on previous research and the dimensions of each construct are reviewed. Details of findings are

provided and opportunities for practitioners, researchers, policy makers and educators to enhance to the well-being of residents through culture and climate change efforts are discussed.

WORK STRESS AND BURNOUT AMONG DIRECT CARE WORKERS SERVING ADULTS AGING WITH INTELLECTUAL/DEVELOPMENTAL DISABILITIES: THE ROLE OF WORK SOCIAL SUPPORT AND LOCUS OF CONTROL

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Though direct care workers (DCWs) serving adults with intellectual and developmental disabilities (ID/DD) serve as caregivers and key role models for adults with ID/DD, work stress can impede capacities. External resources, such as instrumental and emotional support from supervisors and coworkers and internal resources, such as internal locus of control, can help DCWs perceive stressors as less threatening, and galvanize them to cope more actively. We examined how work stress and resources were associated with burnout, using data from a survey of DCWs (n = 323) who serve adults with ID/DD from 5 community-based organizations which provide residential, vocational, and personal/respite/foster care services. Work stress was defined according to both aggregate and sub-dimensions, as was work social support. A series of multiple regression analyses indicated that, while work stress was positively associated with burnout, work social support lessened the effects of work stress on burnout. Furthermore, locus of control had stronger inverse relationship with burnout among workers with a lighter workload. Locus of control also lessened the negative effects of work stress on burnout among workers experiencing higher levels of exclusion from organizational decision-making. Considering that heavy workloads are an inherent part of direct care work, particularly in organizations with limited funding and staffing, work social support proves to be an essential resource. Our findings may suggest limits to personal control resources (i.e., locus of control) in managing high stress levels.

DOING THE JOB: CNAS AND LPNS VIEW THEMSELVES AND ONE ANOTHER

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The nursing home (NH) industry continues to grapple with staff turnover, absenteeism, understaffing and heavy reliance on agency staff. Staffing problems are especially acute for nursing assistants (NAs), but often extend to the licensed practical nurses (LPNs) who are their immediate supervisors. Previous research has examined NAs' views in depth, but less often included those of LPNs. This study used focus group methodology to examine how NAs and LPNs view their own and the other group's work roles and challenges. Twelve NA groups (total N=94) and 7 LPN groups (N=61) convened at the National Association of Health Care Assistants, regional meetings of southeastern quality improvement organizations, and non-NH sites throughout Georgia. Groups drew from different NHs to ensure confidentiality and diverse representation. Facilitators used broad questions to encourage open-ended discussion (e.g., NAs' and LPNs' work roles and challenges, causes of turnover, characteristics of a good staffer). Audiotaped sessions were transcribed verbatim, content analyzed by multiple readers using an emergent coding system, and recoded by additional readers to ensure validity and reliability. Several similar themes emerged for both groups: strong influence of organizational culture (e.g., cliques and gossip, NAs' fear of being fired), poor working conditions, challenging relationships with supervisors, lack of teamwork among NAs. Each group also voiced unique concerns, e.g., NAs emphasized interpersonal conflict and work/home spillover, LPNs often cited multiple job roles and communication within the organizational hierarchy. This presentation

reviews each group's common and unique themes, and implications for workplace interventions to address staffing problems.

INTENT TO LEAVE AMONG DIRECTORS OF NURSING (DONS) IN NURSING HOMES

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Purpose: Scarce literature exists on determinants of intent to leave among directors of nursing (DONS) in nursing homes. The purpose of this study was to examine factors that influence DON intent to leave. **Design and Methods:** We developed a framework of analysis at three levels: individual (DON), facility, and county level factors. A survey of nurse supervisors in Texas nursing homes, the 2003 Texas Nursing Facility Medicaid Cost Report, and the Area Resource File, were merged. A total of 626 observations at the facility level were included in the study. Only DON respondents were included in this study. We examined differences in DON characteristics based on ownership type and urban influence. To predict the likelihood of DON intentions to leave we constructed three logit models. **Results:** DONS working in for-profit homes were more inclined to leave, less satisfied with their job, and had lower levels of perceived empowerment in terms of autonomy. More DONS with a college degree worked in urban versus rural settings. Intention to leave was significantly higher for DONS working in urban areas. Job satisfaction was significantly and inversely associated with intent to leave in all three logit models. Higher perceived salary competitiveness and level of empowerment was associated with reduced odds of intending to leave. **Implications:** It is important to consider psychological factors when studying and understanding intentions to leave among DONS. Nursing home administrators should focus on job satisfaction, empowerment in decision making, and salary competitiveness when considering retention strategies for DONS.

SESSION 60 (PAPER)

WHAT IMPACTS TREATMENT PLANS FOR OLDER ADULTS

THE COMPLEMENTARITY AND SUBSTITUTION OF PHYSICAL THERAPY AND CHIROPRACTIC CARE AMONG OLDER CONSUMERS

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Prevalence of Complementary and Alternative medicine (CAM) use in general and chiropractic specifically among elderly in the U.S. is well documented. Promoters of CAM are optimistic about the economic implications. Economic consequences of CAM use depend on whether CAM and conventional care are substitutes or complements. However, there is dearth of analytical investigation of the relationship of CAM with conventional care. This study uses Grossman's model of demand for health to estimate demand for physical therapy and chiropractic and examine the relationship between physical therapy and chiropractic among older adults with arthritis, back problem and /or other musculoskeletal problems. Data used are from the 2002 and the 2004 Medical Expenditure Panel Survey. Sample is comprised of 9,347 individuals age 50 and over with arthritis, back problem and /or other musculoskeletal problems. Demand is estimated using a two-part model. Own- and cross-price elasticities are computed. About 6% of the sample reported using physical therapy, 8% used chiropractic care and 2% used both. Price of chiropractic care (—), time constraint (—), unearned income (+), and smoking status (—) were significant predictors of likelihood of use of physical therapy. Medicaid insurance (—) and time constraints (—) have significant impact on number of visits to physical therapist. Demand for chiropractic is primarily a function of preferences of

consumers. Results show that demand for physical therapy is price inelastic. The total cross-price elasticity of chiropractic is positive suggesting complementarity. This study has several implications for consumers, practitioners, health insurers, policy makers, and researchers.

LONG-TERM CARE SERVICE USE AND NEED AMONG BABY BOOMERS AND OLDER ADULTS WITH MENTAL ILLNESS

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The exponential growth of Americans age 65 and older impacts every aspect of society presenting both challenges and opportunities to families, businesses, health care providers, and policymakers. Demographic projections indicate the numbers and proportion of older adults in the United States will increase significantly as the cohort of baby boomers start turning 65 in 2011 (U. S. Census Bureau, 2000). As the nation experiences this unprecedented population growth, demographic trends suggest that the number of older people with mental illnesses is also increasing (Jeste and Muñoz, 1999). Since the beginning of deinstitutionalization, many people with mental illness have moved into the community but experience difficulty in finding adequate long-term care (LTC) services and supports. This study evaluates LTC use and need among a subset of baby boomers and older adult respondents reporting mental illness in the 2007 Connecticut Long-Term Care Needs Assessment. Older adults report greater impairment in activities of daily living and instrumental activities of daily living (50% and 82% respectively) than baby boomers (34% and 77% respectively) and are less likely to report unmet service need (46% vs. 56% respectively). The two greatest community LTC service needs reported by both older adults and baby boomers are transportation (19% and 25% respectively) and home-maker services (19% and 23% respectively). Identifying the LTC needs of older adults and baby boomers reporting mental illnesses is an important step in helping them remain in the community as long as possible and in informing policy at the state and local level.

ADVANCE CARE TREATMENT PLAN FOR AFRICAN AMERICAN FAMILY CAREGIVERS: PRELIMINARY STUDY RESULTS

G.J. Bonner, D.M. Ingram, E. Wang, D.J. Wilkie, B. Dancy, C. Ferrans, *School of Public Health, University of Illinois at Chicago, Chicago, Illinois*

Research is limited on end-of-life (EOL) treatment decisions made by African American (AA) family caregivers. A pilot study was conducted to examine the feasibility of implementing an advance care treatment plan (ACT-Plan) with AA caregivers of relatives diagnosed with dementia. Cardiopulmonary resuscitation (CPR), mechanical ventilation (MV) and tube feeding (TF) were EOL treatments discussed in the ACT-Plan. In a pretest and 4-week posttest, two-group randomized design, 64 caregivers were assigned to the ACT-Plan ($n = 32$) or attention control ($n = 32$) condition. Based on Bandura's Social Cognitive and Kolb's Experiential Learning theories, the ACT-Plan used strategies such as case studies to enhance knowledge, self-efficacy, and behavioral skills to make EOL treatment plans in advance. Two similar adult day care centers served as either an intervention or control site. Participants were recruited concurrently at each center. They participated in 4 weekly sessions in a group setting of eight. The ACT-Plan condition (site 1) received EOL treatment discussions. The attention control condition (site 2) received health promotion. Pre and posttest questionnaires were compared between the two conditions that measured knowledge, self-efficacy, CPR, MV and TF outcomes. Descriptive statistics, ANCOVA and logistic regression models were used to compare the two groups. Preliminary findings suggest that the ACT-Plan is feasible and content is culturally appropriate. Caregivers' responses indicate an increase in knowledge and comfort with EOL advance care plan decisions.

CHANGES IN MUTUALITY AMONG ALZHEIMER'S AND PARKINSON'S DISEASE CAREGIVERS

B. Shim, L.L. Davis, *School of Nursing, Duke University, Durham, North Carolina*

Background: Alzheimer's Disease (AD) and Parkinson's Disease (PD) are the two most common nonreversible neurodegenerative disease in the US. AD and PD family caregivers are reported to have multiple adverse social, financial, psychological, and physical health outcomes. **Mutuality**, the caregiver's perception of the positive quality of the care relationship, is reported to influence caregivers' psychological outcomes. **Purpose:** To explore changes in mutuality among AD and PD caregivers with disease progression over time. **Methods:** Secondary analysis of longitudinal data from an ongoing clinical trial of skill training for AD and PD caregivers. Baseline, 6 months and 12 months data were analyzed on 91 caregivers from the wait-listed group. Ninety one percent were family members (65% spouses, 26% adult children caregivers). To test whether the independent variables had significant effects on mutuality at baseline and over time, multilevel models for change were used for analyses. **Results:** Mutuality showed a slight decline for both AD and PD caregivers. Caregivers with significantly lower mutuality: 1) had less caregiving experience, 2) were caring for care recipients with greater functional dependency (higher IADL scores), and 3) had more depressive symptoms (higher CES-D scores). **Conclusions:** Caregivers with more caregiving experience continued to have higher mutuality throughout the one year follow up period. Lower mutuality was correlated with higher levels of care recipient functional dependence and more caregiver depressive symptoms. Clinicians should consider promoting relationship focused skill training to enhance psychological outcomes for AD and PD caregivers.

SESSION 65 (SYMPOSIUM)

WITHIN-FAMILY DIFFERENCES IN AMBIVALENCE: WITHIN AND ACROSS GENERATIONS

Chair: *J. Suito, Purdue University, West Lafayette, Indiana*

Discussant: *A. Shapiro, Purdue University, West Lafayette, Indiana*

The role of ambivalence in interpersonal relations has received considerable attention in the literature across the past decade. This research has shown that ambivalence is common in families and is consequential for exchanges of support, relationship quality, and well-being. In this symposium, we bring together the study of ambivalence and within-family differences, exploring several types of interpersonal family relationships. Suito, Gilligan, and Pillemer begin the symposium with a paper on conceptualizing and measuring ambivalence in intergenerational relations. Using data on mothers and adult children from the Within-Family Differences Study (WFDS), they discuss the ways in which using different measures of ambivalence result in variations in which mother-child dyads are classified as ambivalent. Next, Pillemer, Suito, Fuller-Rowell, and Mock use data from the WFDS to investigate differences in the levels and predictors of mothers' and fathers' ambivalent feelings toward their adult children. Third, Birditt, Fingerman, and Tighe examine the transmission of parent-adult child ambivalence across generations using data from grandparents, parents, and adult children, collected as part of Fingerman's Family Exchanges Study. Last, Gilligan, Suito, and Pillemer study congruence in adult siblings' reports of ambivalence in their relationships with one another, using data from the WFDS. Finally, panelists and the discussant explore the ways in which the collective findings from this set of papers shed light on patterns of ambivalence in family relations, and the implications of these patterns for theory and practice.

"ARE YOU SURE I'M AMBIVALENT?" CONCEPTUALIZING AND MEASURING AMBIVALENCE IN MIDDLE AND LATER-LIFE FAMILY RELATIONS

J. Sutor, M. Gilligan, K. Pillemer, *Purdue University, West Lafayette, Indiana*

In recent years the concept of ambivalence has played an increasing role in the study of parent-adult child relations. A variety of direct and indirect measures have been used across these investigations, with the implicit assumption that these measures are conceptually similar and therefore relatively interchangeable. In the present paper, we use data on 2,138 mother-adult child dyads nested within 566 later-life families as part of the Within-Family Differences Study to explore the ways in which different measures of ambivalence produce variations in the classification of mother-child dyads as ambivalent. Specifically, we compare several of the most commonly used direct and indirect measures of ambivalence, examining whether the same dyads are classified as moderately to highly ambivalent, based on the mothers' reports. These comparisons show substantial differences in classification across measures, calling into question whether they are sensitive to variations in this relational phenomenon.

INTERGENERATIONAL AMBIVALENCE: ARE THERE DIFFERENCES BETWEEN MOTHERS AND FATHERS?

K. Pillemer¹, J. Sutor², S. Mock³, T. Fuller-Rowell¹, *1. Cornell University, Ithaca, NY, 2. Purdue University, West Lafayette, Indiana, 3. University of Waterloo, Waterloo, Ontario, Canada*

In this paper, we apply a within-family design to the study of ambivalence, using data collected from 129 older couples as part of the Within-Family Differences Study. Specifically, we compare mothers' and fathers' assessments of ambivalence toward all of their adult children, as well as gender differences in predictors. Overall, fathers report higher levels of ambivalence towards their children than do mothers. However, this varies by child's gender; fathers report more ambivalence towards sons than daughters whereas mothers report more ambivalence toward daughters than sons. Effects of child's educational achievement and parent-child similarity also differed by parents' gender; low educational achievement was a stronger predictor of fathers' than mothers' ambivalence whereas dissimilarity of outlook was a stronger predictor of mothers' than fathers' ambivalence.

IT'S A FAMILY AFFAIR: AMBIVALENCE ACROSS THREE GENERATIONS

K. Birditt¹, K. Fingerman², L. Tighe¹, *1. Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 2. Purdue University, West Lafayette, Indiana*

Family systems theory suggests that patterns of interaction are passed from one generation to the next. Likewise, feelings of ambivalence in intergenerational ties may be transferred across generations. This study examined whether reports of intergenerational ambivalence are similar across three generations. Participants included 633 middle aged participants (ages 40 to 60), 592 of their offspring (ages 18 to 41), and 337 of their parents (ages 59 to 96). The youngest generation (G3) reported the highest levels of ambivalence while the oldest generation (G1) reported the lowest levels. Participants reported greater ambivalence toward mothers than fathers. Multilevel models revealed that greater ambivalence between middle aged participants (G2) and their fathers (G1) predicted greater ambivalence among middle aged participants regarding their own children (G3). It appears that ambivalence varies across generations and that ambivalence may transfer via fathers rather than mothers.

DESCRIBING AND EXPLAINING CONGRUENCE IN ADULTS' AMBIVALENCE TOWARD THEIR SIBLINGS

M. Gilligan¹, J. Sutor¹, K. Pillemer², *1. Purdue University, West Lafayette, Indiana, 2. Cornell University, Ithaca, New York*

Recent research has shown that ambivalence is useful in understanding the complex nature of family relations. Studies have demonstrated the presence of both positive and negative emotions in several familial relationships; however, this research has not examined whether there is congruence in family members' ambivalent feelings. It is possible that some family members may feel ambivalent about a particular relationship whereas other family members do not. The present paper uses data from the Within-Family Differences Study to examine congruence in adult siblings' reports of ambivalence in their relationships with one another. An indirect measure of ambivalence was created using data collected from 708 adult children nested within 274 later-life families. Preliminary results suggest that siblings experience ambivalence in the sibling relationship differently. Less than half of the adult-child dyads shared a similar level of ambivalence regarding their relationship with their siblings. This finding offers a more complete and nuanced understanding of sibling relationships in later-life.

SESSION 70 (PAPER)

CAREGIVER ISSUES

BALANCING RESIDENTS' NEEDS FOR A HOMELIKE ENVIRONMENT WITH CAREGIVERS' NEEDS FOR EFFICIENT WAYS TO DELIVER CARE

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This study examines how three residential care centres in Canada balance residents' needs for homelike environment with staff needs for efficient care delivery. Research questions: (1) How do the residential care centres rate on two standardized measures of physical therapeutic environments - the Professional Environmental Assessment Protocol (PEAP) and the Therapeutic Environment Screening Survey-Nursing Home (TESS-NH/RC)? (2) What factors are related to homelikeness that facilitate or hinder care delivery, according to family members and staff? (3) What suggestions, if any, do family members and staff members have to balance homelikeness with efficient ways to deliver care? (4) How do planning and research managers reconcile the suggestions with required standards, policies, procedures and guidelines? Methods: Interviews are used with family members, serving as proxies for residents, and separately with staff, to discuss participants' experience and their needs for homelikeness and efficient delivery of care. A focus group session with planning and research managers provides data for how organization representatives reconcile the suggestions of family and staff member. Transcripts are coded by identifying persistent words, phrases, themes, or concepts within the data. The analytic technique is content analysis. Preliminary results: Homelikeness is associated with more than physical features in an environment, and includes pets, program, sensory experiences and staff attitude. Recent policies on safety take staff time away from residents thereby reducing homelikeness for residents. As well, staff members feel they are not as effective in caring for residents. The results are discussed in the context of health care restructuring.

INTERNET SAVVY CAREGIVER: DEMENTIA TRAINING

M. Lewis¹, J.V. Hobday², K. Hepburn¹, *1. Emory University, Atlanta, Georgia, 2. HealthCare Interactive, Inc., Minneapolis, Minnesota*

The goal of the Internet Savvy Caregiver program, conceptually derived from the previously validated face-to-face Savvy Caregiver Program, was to develop and test an Internet-based psycho-educational program designed to provide persons caring for relatives with dementia the

knowledge, skills, and outlook they need to succeed in the caregiving role. The project employed an iterative process to develop and test the prototype. Forty-seven subjects completed the Internet program and follow-up questionnaire, a 60% return rate. The participants, who came from ten states, were 79% white and 21% African American, Asian, or Native American. Their average age was 55 years (range 29-87), with an average of 5 years of caregiving (range 1-21). The formative evaluation focused on issues of acceptability, usability, and satisfaction, along with a self-reported effectiveness assessment. Results indicated that participants perceived they gained confidence in caring for their family member (93.6%), new ideas and strategies for caring (95.7%), and better understanding of changes in thinking (100%). Only 76.5% of participants stated they enjoyed learning in the internet format as opposed to attending a class. Open-ended questions yielded rich data. The respondents most liked information and caregiving strategies; videoclips of professionals, caregivers and persons with dementia; convenience of the internet program; and presentation of the program. They least liked repetition of information, length of the program, and not being able to ask questions, or interact with others. This suggests adding interaction such as a chat room or an opportunity to email a professional with questions would enhance the program.

WHAT MATTERS MOST TO CARERS OF PEOPLE WITH MILD TO MODERATE COGNITIVE IMPAIRMENT AS EVIDENCE FOR TRANSFORMING CARE

D.J. Hain¹, T. Touhy¹, G. Engstrom², *1. Nursing, Florida Atlantic University, Boca Raton, Florida, 2. Malardalen University, Eskilstuna, Sweden*

There is scant qualitative research regarding the experience and needs of carers of persons with cognitive impairment and few evidence-based interventions to guide them on their journey. The purpose of this qualitative pilot study was to describe what matters most to family carers of persons with mild to moderate stage of cognitive impairment in order to design individualized strategies. Community dwelling family members were recruited from a university based memory disorder clinic. As part of a GNP consultation program, participants met once with a GNP who used open-ended questions, such as 1) what matters most to you right now; and 2) what are your hopes and dreams for the future, to promote dialogue with the carer. A descriptive phenomenology approach was used to analyze the transcribed interviews. Ten family carers, spouses (n = 7) and daughters (n = 3) participated in the study with ages ranging from 45-80 years. Four themes emerged from the data: 1) Struggling to keep normalcy in life; 2) Seeking guidance; 3) Preserving self and loved one; and 4) Being uncertain and frightened of the future. Coming to know what matters most to carers of persons with cognitive impairment guided individualized strategies. These approaches included partnering between the GNP and the family carers and mutual goal setting that could be incorporated into their everyday lives. This study provides evidence of the importance of considering the unique and ongoing needs of carers throughout their journey as health care professionals strive to transform care.

FRONTOTEMPORAL DEMENTIA CAREGIVERS AND RESEARCHERS: PARTNERING FOR BRAIN DONATION

M.G. Austrom^{1,2}, S.L. Dickinson³, S.S. Denny³, B.R. Matthews^{4,2}, B. Ghetti^{5,2}, *1. Indiana University School of Medicine, Indianapolis, Indiana, 2. Indiana Alzheimer Disease Center, Indianapolis, Indiana, 3. Association for Frontotemporal Dementias, Philadelphia, Pennsylvania, 4. IUSM Dept of Neurology, Indianapolis, Indiana, 5. IUSM Dept of Pathology and Laboratory Medicine, Indianapolis, Indiana*

No information exists about brain donation among caregivers of persons with frontotemporal dementia [FTD]. Similarly, no conclusive information exists to suggest that caregivers of FTD are aware of the importance of participation in advancing biomedical research on this

rare disease. To advance science and understand morphological and biochemical changes occurring in FTD it's important to understand caregivers' concerns and perceived barriers to research participation, especially brain donation. To address this the Association for Frontotemporal Dementias [AFTD] and the Indiana Alzheimer Disease Center Education Core [IADC] partnered using a community-based participatory research [CBPR] model. CBPR is especially relevant in for rare diseases, where the small number of patients exacerbates issues of grant funding and statistical sample size. Organizations such as AFTD can combine their ability to coordinate their constituents with scientists to drive forward research aimed at translational goals. The AFTD-IADC CBPR project was designed to address barriers to brain donation from the caregivers' perspectives to design appropriate, respectful educational materials and recruitment tools to increase participation in brain donation programs. It's anticipated results will also inform researchers working with other rare neurodegenerative diseases. Six focus groups in three cities are designed to gain insight about caregivers' understanding of and barriers to brain donation and effective recruitment strategies. Developing a CBPR project, implementing communication systems, addressing the challenges of virtual collaboration and results from the first four focus groups will be presented. Research supported by: NIH R03HD059655-01 & R03NS065490-01. Drs. Guerriero Austrom, Matthews and Ghetti are also supported by NIH P30AG10133.

SESSION 75 (SYMPOSIUM)

CAUSES AND CONSEQUENCES OF DEPRESSION: EVIDENCE FROM THE ENGLISH LONGITUDINAL STUDY OF AGEING

Chair: *M. Stafford, Epidemiology and Public Health, UCL, London, United Kingdom*

Discussant: *J. Smith, University of Michigan, Ann Arbor, Michigan*

This symposium exploits longitudinal data capturing the economic, social, psychological, biological and health elements of the ageing process in the English Longitudinal Study Of Ageing (ELSA). Taking the onset of depressive symptoms as its focal point, this collection of papers brings together work investigating factors which may contribute to their development as well as the consequences of those symptoms for subsequent disease risk. Depressive symptoms are a relatively common phenomenon for older people and their causes are multi-factorial. Three papers in this session will summarise work which relate biomedical factors (namely body size and shape) and socioeconomic factors (including work and retirement) to the onset of depressive symptoms in older age. In addition to the functional and quality of life limitations experienced by many people with depression, studies suggest that it may play a causal role in the development of physical disease, including coronary heart disease. Two further papers explore the impact of depression on markers and risk factors for CHD. Low grade inflammation might be an important mechanism in explaining the link between depression and cardiovascular disease and work describing its link with depression will be summarized here. The relationship between depression and incident diabetes will also be described. This collective work highlights the role of psychosocial factors in the development of disease as well as the intimate relationship between physical and mental illness in older age. It exemplifies the use of longitudinal data to explore the interplay of the social, economic and health domains unfolding over time.

PERSISTENT DEPRESSIVE SYMPTOMATOLOGY AND INFLAMMATION: TO WHAT EXTENT DO HEALTH BEHAVIORS AND WEIGHT GAIN MEDIATE THIS RELATIONSHIP?

M. Hamer, G. Molloy, C. de Oliveira, P. Demakakos, *Epidemiology and Public Health, University College London, London, United Kingdom*

We examined if persistent depressive symptoms are associated with markers of inflammation (C-Reactive Protein-CRP and fibrinogen), and if this association can be partly explained by weight gain and health behavior. The study sample included 3609 adults (aged 60.5 +/- 9.2 yrs) from The English Longitudinal Study of Ageing. Depressive symptoms (8-item CES-D scale), inflammatory markers, health behaviors, and body weight were assessed at baseline and 2 yrs follow up. Baseline CES-D score was associated with CRP ($\beta = .035$, SE = .0066) and fibrinogen ($\beta = .023$, SE = .0060) at follow up. Depressive symptoms were also associated with weight gain, smoking, physical inactivity, and alcohol abstinence. We observed both a direct association of depressive symptoms on CRP ($\beta = .013$, SE = .0066) and indirect mediating effects through health behavior (β for total indirect effect = .022, SE=.0023). Associations between depressive symptoms and inflammation can be partly explained by poor health behavior.

DEPRESSIVE SYMPTOMS AND INCIDENT DIABETES IN THE ENGLISH LONGITUDINAL STUDY OF AGING (ELSA)

P. Demakakos¹, M. Pierce², R. Hardy², 1. *Department of Epidemiology and Public Health, University College London, London, United Kingdom*, 2. *MRC Unit of Lifelong Health and Aging, University College London, London, United Kingdom*

We examined whether baseline elevated depressive symptoms (scoring 4 or higher on an 8-item CES-D scale) were associated with incident self-reported doctor diagnosed diabetes and whether this association was mediated by health behaviors and body mass index (BMI). Our sample consisted of 6111 individuals aged 50+ from the English Longitudinal Study of Aging. We estimated Cox proportional hazards models that were gradually adjusted for baseline characteristics (age, sex, marital status, education, household wealth and cardiovascular, psychiatric and other comorbidities). We found that those with elevated depressive symptoms had significantly higher risk of developing diabetes over 4 years of follow-up. The hazard ratio for diabetes was 2.14 (95% CI 1.56-2.94) in the age-adjusted model and 1.62 (95% CI 1.15-2.29) in the fully-adjusted model. We conclude that elevated depressive symptoms are associated with increased risk of developing diabetes in older ages irrespective of sociodemographic factors, previous medical history, health behaviors and BMI.

OBESITY, CENTRAL OBESITY AND DEPRESSIVE SYMPTOMS IN ELSA

P. Zaninotto¹, M. Pierce², E. Breeze¹, C. de Oliveira¹, M. Kumari¹, 1. *UCL, London, United Kingdom*, 2. *MRC, London, United Kingdom*

We used data from 8688 participants of the second (2004-05) and third (2006-07) waves of the English Longitudinal Study of Ageing (ELSA) to explore cross-sectional and longitudinal relationships between depressive symptoms (CES-D; dichotomised at a score greater than or equal to 3) as our outcome measures and compare BMI and waist circumference as predictors. At the second wave of ELSA, increased waist circumference is related to higher odds of reporting depressive symptoms. Increased BMI is related to higher risk of depressive symptoms (OR=1.14 95% Confidence Intervals (CI) = 1.06; 1.2) in women. In mutually adjusted analyses, no association was apparent between BMI and depressive symptoms (OR=0.91 95% CI= 0.79, 1.04) while the association between waist circumference and depressive symptoms remained (OR=1.12, 95% CI=1.05, 1.18). Similar data were apparent when depressive symptoms were examined two years after anthropometric assessment. We conclude that among older people and particularly in women,

waist circumference is a more robust marker than BMI of being at increased risk of reporting depressive symptoms.

SESSION 80 (PAPER)

GERIATRIC EDUCATION

MEASURING "DOSE" OF GERIATRICS IN MEDICAL SCHOOL CURRICULA: AN INNOVATIVE EVALUATION STRATEGY

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The new curriculum at Alpert Medical School, Brown University, integrated geriatrics content throughout all pre-clerkship courses with Donald W. Reynolds Foundation support, beginning 2006-2007. This study reports an innovative strategy to evaluate quality and calculate the quantity or "dose" of geriatrics content through "tracking" of all courses by pre-clerkship medical students. Methods: The baseline amount of geriatrics content was calculated by a thorough review of the 2006-2007 syllabi. Course leaders were then provided appropriate geriatrics content for integration into all courses. First and second year medical student volunteers were recruited and provided a modest honorarium to complete "tracking" forms for each lecture, small group, and clinical experience. Forms were designed to record elements and count the minutes of geriatrics content; assign a numeric rating for quality; and provide evaluative comments regarding perceived success of integration and suggestions for improvement of content. "Dose" was calculated using the average of the reported tracked minutes. Results: First year geriatrics content increased from 5.6 hours at baseline to approximately 40 hours in 2007-2008, while second year geriatrics content increased from 15.9 hours at baseline to approximately 22 hours. Student feedback provided useful real-time suggestions for improvement in the content and integration. Immediate feedback of elements that work well or need improvement allowed for timely mid-course corrections for optimal geriatrics. Conclusions: Tracking provides an effective method to quantify the amount of aging content delivered while eliciting useful student perspectives and suggestions. Seamless integration of geriatrics content may result in underestimating "stealth" aging content.

POST-EVENT EVALUATIONS YIELD VALUABLE INSIGHT TO THE IMPACT OF CONTINUING EDUCATION PROGRAMS

R. Chernoff^{1,2}, S.H. Jasin², S. McKee^{1,2}, K. Clement², S.M. Porbeck², 1. *GRECC, Central Arkansas Veterans Healthcare System, Little Rock, Arkansas*, 2. *Arkansas GEC, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Among the challenging issues in continuing education (CE) is assessment of CE impact on practice and patient outcomes. To evaluate this link, the Arkansas Geriatric Education Center developed a follow-up evaluation instrument for CE programs. The objectives of the survey, containing demographic items and 5 questions (Q), were to gauge the impact of programs on attendees' practice (Q1-3); learn about knowledge transfer (Q4); and assess usefulness of handouts (Q5). This report looks at results obtained from follow-up evaluations collected for 20 programs in a 1 year period. The evaluation, an introductory letter and return envelope were mailed to 1463 attendees of 20 programs (symposia, video teleconferences, in-service training, outreach seminars) offered by the AGECC and its partners through 2008. Response to mailings has been excellent (46%). Response rates are higher when attendees are told to expect the follow-up survey at the time of the program event. Data collected (reported as means) show that 76.2 % of responders reported an impact after attendance at these events. Impact was defined as using the knowledge gained in patient care (55.2%), modi-

fy patient assessment (25.4%), changing patient counseling strategies (22.5%), and noticing improved patient outcomes (10.6%). Responders provided specific comments related to outcomes (5.5%). Reasons for having no impact were: content unrelated to practice (43.3%); content level too high/too low (2.4%), or retired status (7.3%). Sharing knowledge was reported by 66.6% and the handouts were considered useful (59.7%). It is clear that CE is having a positive impact on changes in providers' practice.

FACULTY TRAINING LEADS TO ENRICHED GERIATRICS CURRICULUM

R. Chernoff^{1,2}, S.H. Jasin², S. McKee², K. Clement², I. GRECC, *Central Arkansas Veterans Healthcare System, Little Rock, Arkansas, 2.*

Arkansas GEC, University of Arkansas for Medical Sciences, Little Rock, Arkansas

To expand geriatric content in the education of the next generation of health care professionals, the Arkansas Geriatric Education Center offers a Summer Institute (SI) designed to update the theoretical and practical geriatric knowledge of academic health professionals. For 8 years, faculty at Arkansas colleges and universities has had an opportunity to participate. The SI consists of 24 hours of lectures and 36 hours of shadowing experiences. Lecture topics include normal aging, nutrition, functional independence, end of life issues, speech/voice characteristics of elders, dementia, pharmacotherapy, substance abuse, sexuality, neuropsychiatric assessment, LTC alternatives, legal issues, osteoporosis, fitness and other topics. After encouraging participants to expand their knowledge beyond the comfort zone of their disciplines, they chose shadowing activities of interest to them. Shadowing occurs at UAMS and VA sites. During the program, participating health professionals were urged to incorporate their newly acquired geriatric knowledge into the curricula at their respective institutions. To gauge the impact of the SI in the professional activities of the participants, we sent evaluation surveys to 33 past participants, reached 28 and received 18 responses (61% return rate). Results were: 88.2% have used SI information to develop course materials, 88.2% introduced it into existing classes, and 52.3% incorporated it into course syllabi; 64.7% used SI information in other settings; and 41.2% used it to develop a new course or program. Such outcomes suggest that updating geriatric skills and knowledge of academic health professionals has a significant impact on the educational content provided to future healthcare providers.

FALLS RISK OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE): CREATIVE APPROACH TO GERIATRIC EDUCATION

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Falls are a leading cause of mortality and morbidity among adults over the age of 65. An important part of resident and medical student education is training in evaluating and identifying the patients at risk in order to institute preventive measures. A Falls Risk and Prevention Objective Structured Clinical Examination (OSCE) was developed to improve the quality of patient care by training residents (n=9) and medical students (n=70) in falls prevention. During 2008, the Falls OSCE was administered to medical students and Physical Medicine and Rehabilitation residents. The residents and medical students performed a history and physical examination on standardized patients while being directly observed and graded. The residents, only, received scores and feedback on their performance. Since this exercise was designed as a pre-test, the residents and students received no prior training in falls assessment. The overall mean scores indicated that both the medical students and the residents were weak in their abilities to write a SOAP (Subjective, Objective, Assessment, Plan) note for assessing patients at risk for falls. The highest scoring area on the SOAP note for both disciplines was the "Plan," with the residents' overall mean score 37% and the med-

ical students' 34%. The standardized patients' ratings of the residents' and medical students' performance on the cognitive and mobility assessments were as follows: overall mean for the residents was 43%, and for the medical students 23%. These weaknesses are being addressed in falls risk training, with success to be recorded in future OSCEs.

SUSTAINABILITY: IMPLICATIONS FOR THE HEALTHY AGING OF NATIONAL GERONTOLOGICAL INITIATIVES

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Geriatric Education Centers (GECs) have been charged by the Health Resources and Services Administration (HRSA) with becoming self-sustaining beyond the period of their funding. In programs that impact the public health, including geriatric health, "sustainability is critical". This study of GECs sought to arrive at a definition of sustainability, determine how GECs pursued sustainability over time, identify changes that occurred in the types of GEC revenue over time, and ascertain whether GECs would have pursued different strategies to prepare for the goal of sustainability. Sources of data included fiscal and narrative portions of multi-year GEC grant applications, and in-depth interviews with thirteen GEC administrators, faculty, staff, and advisory board members representing seven GECs sites, three of whom were national officers of the National Association of Geriatric Education Centers and the National Association of Geriatric Education. Ironically, this study concerning sustainability was undertaken at the very time at which there was a complete elimination of funding for all GECs across the country. The theoretical framework of academic capitalism and the knowledge/learning regime served as the lens through which this study of GECs was explored. Four conceptions of sustainability emerged from this study: 1) maintenance of geriatric mission and activities, 2) institutionalization of organizational infrastructure, 3) community visibility, and 4) strategic response to change. These categories were not mutually exclusive. Rather, multiple paths toward sustainability could be pursued by each GEC. Each of these definitions of sustainability will be explored, with implications for the healthy aging and survival of national gerontological initiatives.

SESSION 85 (PAPER)

PHYSICAL ACTIVITY-HS PAPER SESSION

ACTIVITY LIMITATION STATUS TRENDS BY MARITAL STATUS AMONG OLDER ADULTS, 1983-2003

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The past several decades have witnessed rapid change in the predominant family structures and norms in the United States, and these changes may alter the link between marital status and health. However, we know very little about historical trends in the relationship between marital status and health. Activity limitation status, one of the most often used measures for health status, is particularly relevant in advancing age when activity limitations become more prevalent. Based on data from the National Health Interview Survey (NHIS) 1983-2003, this study examines activity limitation status trends by marital status among older adults aged 60 and above over the past two decades in the United States. Results from preliminary analyses suggest that married older adults became less likely to report any activity limitation from 1983 to 2003; while widowed older adults became more likely to report any activity limitation over the same time span. Gender and race variations in those trends are also examined.

MISPERCEPTION OF MEETING THE PHYSICAL ACTIVITY RECOMMENDATION IN OLDER PERSONS USING ACCELEROMETRY

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The aim of this study was to investigate whether older persons correctly perceive meeting the physical activity recommendation using objective measurements of physical activity. Self-report (questionnaire) and objective (7-day accelerometry using 1 minute epochs and Actigraph model GT1M) information on physical activity level and meeting the Dutch recommendation were obtained from 138 men and women aged 65-75 years who participated in the lifestyle study (n=1,058) of the Longitudinal Aging Study Amsterdam. The study sample was slightly older (71 vs 69 y, $p < 0.05$) but had a similar gender, age, education, BMI and self-reported physical activity ($p > 0.3$) compared to the total sample. A majority of the sample (89.6%) reported to be physically active for at least 30 min/d on at least 5 days of the week. For 91.7% this information was confirmed using accelerometry data. After thoroughly explaining the recommendation, 56.8% reported to meet this recommendation. Based on objective accelerometry this percentage was only 25.8% when using the cutpoint 760 cpm to indicate moderate to vigorous activity. Based on this cutpoint, 37.1% of the older persons overestimated their physical activity level and 6.1% underestimated their level. Determinants of overestimation included male gender ($p < 0.001$), lower satisfaction with physical activity level ($p < 0.05$), lower attitude ($p < 0.05$) and lower self-efficacy ($p < 0.001$) of meeting the recommendation. In conclusion, one out of four older persons meet the physical activity recommendation based on objective data. This percentage is much lower compared to self-report. This misconception may hamper the effectiveness of health promotion campaigns in older persons.

DISABILITY-SPECIFIC AND GRADED PROTECTIVE EFFECTS OF REGULAR PHYSICAL EXERCISE ON SURVIVAL IN CHINESE OLDER ADULTS

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Background and Objectives: We previously identified four meaningful disability subtypes based on cross-classification of self-reported and physical performance testing. The current study investigates the disability-specific impact of exercise on 3-year survival. **Methods:** We studied 16,020 elders age 65+ from the Chinese Longitudinal Healthy Longevity Survey. Self-reported ADLs included bathing, dressing, toileting, transfers, feeding, and continence. Physical performance measures included chair stands, picking up a book, and turning 360°. A 2X2 table cross-classified presence or absence of any self-reported or observed limitation. We used Cox proportional hazards models to estimate 3-year survival patterns among those exercising or not, within each disability subtype, and adjusted for potentially important confounders (demographic, medical, socioeconomic, and lifestyle). **Results:** Prevalence of "regular physical exercise" was 47% in elders without disability, dropping to 26% and 14% in those with performance limitations and severe disability, respectively. Within each disability strata, regular physical exercise was strongly protective, with hazard ratios ranging from 0.79-0.92. Those with the most severe disability subtype always had the greatest mortality hazard, regardless of whether exercising or not (HR ex = 1.81, 1.55-2.12; no ex = 2.17, 1.93-2.43). Interestingly, the mortality hazards in the groups with mild disability who were exercising (HR 1.25, 1.08-1.45; HR 1.29, 1.04-1.59) were more similar to those with no disability but who were not exercising (1.13, 1.01-1.27) whereas mortality hazards for those with mild disability who were non-exercisers (1.51, 1.35-1.70; 1.66, 1.40-1.97) were more similar to the most

severely disabled group. **Conclusion:** Regular physical exercise has disability-specific and graded protective effects on 3-year survival in elderly Chinese adults.

EFFECTS OF LIFESTYLE MODIFICATION ON MUSCLE STRENGTH AND QUALITY IN OBESE OLDER ADULTS

T. Manini, H. Patel, M. Pahor, S. Anton, *University of Florida, Gainesville, FL*

Background: Very few studies have evaluated the effect of weight loss in older obese subjects because of concerns for paralleled muscle loss. **Objective:** To determine the effects of a six-month weight loss and exercise (WL+E) intervention on muscle strength and quality in older obese women. **Methods:** Participants were randomized to either an educational control group (EC) (n = 13, 64 ± 7.3 years) or weight loss and exercise group (WL+E) (n = 13, 63.6 ± 4.7 years). The WL+E intervention consisted of educational sessions to reduce 500-100 kcal/day and aerobic and resistance exercises 3 days per week. The EC intervention included a series of classes, lectures and field trips/outings. Area for the vastus lateralis muscle was assessed via magnetic resonance imaging in the thigh. Leg strength was assessed during maximal voluntary isokinetic extension. **Results:** The WL+E group lost 7.2 ± 3.9% of body weight, whereas weight did not change in the EC group (0.5 ± 3.5%). The WL+E group lost 2.5 ± 11.7% lean muscle mass whereas muscle mass did not change in the EC group (0.3 ± 1.2%). Absolute leg extension strength increased 14.3 ± 18.0% in the WL+E group and slightly increased in the EC group (4.4 ± 19.6%). Muscle quality (Leg extension strength / muscle area) increased 8.6 ± 37% in the WL+E group and 3.1 ± 11.5% in the EC group. **Conclusion:** Despite muscle loss, older obese women who underwent weight loss plus exercise maintained their muscle strength and showed strong signs of improved muscle quality.

SESSION 90 (PAPER)

AGE AND WORK

TEN YEARS LATER: A FOLLOW-UP STUDY OF PROFESSORS STILL WORKING AFTER AGE 70

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Little is known about the impact of the end of mandatory retirement on professors over the long term. This follow-up study investigates the ten-year experience of professors who chose not to retire from a major research university after the elimination of the age 70 mandatory retirement age in 1994. The initial interview study took place in 1998 (Dorfman, 2000, 2002; Dorfman & Kolarik, 2005). The present study investigates major reasons for continuing to work or retire, professional and non-professional activities, perceptions of departmental and institutional atmosphere and student and faculty attitudes toward older faculty, and preparation and plans for retirement. All surviving professors (n = 13; age 80+) agreed to be re-interviewed in 2007; 9 were now retired and 4 continued to work full time. Content analysis of the tape-recorded open-ended questions (inter-rater reliability = .94) revealed that employed professors said they continued to work mainly because they enjoyed it, whereas retired professors said they retired mainly because of age or felt it was time to retire. Retired professors (88%) as well as their employed counterparts continued professional activities, primarily research. Both groups reported mixed reactions to the overall atmosphere in their departments and the university as well as to student and faculty attitudes toward older faculty, with one-third of retirees reporting departmental or institutional pressures to retire. The major type of planning for retirement was financial. Implications for individuals and institutions are discussed.

LABOUR MARKET POSITION AND HEALTH AT OLDER AGES IN ENGLAND AND WALES, 1971-2001

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Labour Market Position and Health at Older Ages in England and Wales, 1971-2001 After attending this talk, participants will have a sound appreciation of the changing circumstances under which two cohorts of older citizens in the UK leave the labour market during the years 1971-2001 and the resulting consequences for their health and mortality. Recent UK government initiatives to plan for population ageing include measures to encourage people to retire later and whilst many studies have demonstrated the relationship between labour force position and health during people's working lives across there is less evidence on the health consequences of labour force position in later life. The analysis draws upon linked census and death records in the UK's Office for National Statistics Longitudinal Study, cohorts of people around State Pension age (50-69 years) were selected from each decennial census, 1971-2001, and their subsequent health. Despite considerable change in the nature of the labour market, the relationship between labour force position in early old age and mortality has remained remarkably stable over time for both men and women. People in work when approaching their pensionable years have enjoyed relative risks of mortality around a third lower than other groups among men, and up to 40 per cent lower among women. As expected, being out of work due to sickness is associated with the poorest health. The persistence of poor health among the permanently sick suggests that policies aimed at encouraging later life employment should ensure provision which takes careful account of the circumstances of people with chronic health conditions.

LABOUR MARKET PARTICIPATION AND DEPRESSIVE SYMPTOMS AT OLDER AGES IN THE US AND UK

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In this paper we analyze the relationship between depressive symptoms and labour market activity as households reach retirement age in the US and the UK. We use two exceptionally rich datasets, the ELISA dataset for the UK and the HRS dataset for the US, constructed by design to provide analogous information from country specific representative populations. First we examine cross-sectional variation in the direction and magnitude of reported depressive symptomology, using a psychometrically validated scale, the CES-D, by labour market status, by occupation and by other health, behaviour and socioeconomic characteristics in overlapping time periods in the US and England. Second we take advantage of the panel data construction to investigate the correlation between depression symptomology overtime and labour market participation based on typical retirement ages in the two countries overall and by socioeconomic correlates. We believe the comparative approach is particularly interesting for two reasons. First it allows us to explore cross-country differences in diagnosis (and treatment) of depression, in co-morbid conditions and in disability benefit institutions. Second, it allows us to exploit variation in labour market institutions such as state pensions which leads to similar individuals in the two countries (e.g. women aged 61) being differentially likely to be working for country-specific, as opposed to individual-specific, reasons.

JOB FACTORS ASSOCIATED WITH RETIREMENT INTENT IN OLDER BEDSIDE NURSES

S. Klaus, Y. Yankovskyy, C. Potter, K. Leiker, *School of Nursing, University of Kansas, Kansas City, Kansas*

Although there is anecdotal evidence to suggest some job characteristics are unappealing to older nurses, research on specific factors that may contribute to the intent to retire is limited. As large numbers of RNs near retirement age it is of paramount importance to understand modifiable factors that could potentially delay retirement, leaving veteran nurses in the workforce. We conducted an exploratory study using data from the 2008 National Database of Nursing Quality Indicators® (NDNQI®) RN Survey. The sample included RNs age 60 and older (n=10,666) that work in acute care hospitals in direct care roles. The majority of the study respondents were female (94%), white (81%), and worked full time (64%) on the day shift (68%). Sixty five percent of the sample had a diploma or associate degree as their highest nursing degree and had been in practice on average 32 years. Logistic regression was performed and revealed that a nurse's perception of the unit's general quality of care (OR=0.875, p=.029) and whether important things get done on the unit (OR=0.922, p=.005) were inversely related to retirement intent. Additionally, job enjoyment (OR=0.834, p=.002), and satisfaction with job autonomy (OR=0.889, p=.006) and the nurse manager (OR=0.897, p=.005) were negatively related to intent to retire. Nurses that work overtime (OR=1.351, p<.001) or float outside their regular unit (OR=1.244, p=.04) were also more likely to say they will retire within the next year. This work highlights the impact that working conditions play in retirement plans of nurses.

SESSION 95 (PAPER)

INTERPERSONAL RELATIONSHIPS IN RESIDENTIAL SETTINGS: RESIDENTS, STAFF, AND NON-STAFF

THE INCIDENCE AND CORRELATES OF ELDER MISTREATMENT BY NON-STAFF IN MICHIGAN NURSING HOMES

Z. Zhang¹, C. Page¹, T. Conner¹, L. Post², 1. *Michigan State University, East Lansing, Michigan*, 2. *Yale University, New Haven, Connecticut*

Although elder mistreatment by staff in nursing homes has caught the attention of the public and the Congress in recent years and generated a significant amount of research on the incidence, prevalence, and risk factors of abuse and neglect in nursing homes, there is little attention on another type of abuse that may be more prevalent in nursing homes: the mistreatment of nursing home residents by non-staff including other residents, family members, and other visitors. In this study, we drew data from the 2005 and 2007 Michigan Survey of Households with Family Members Receiving Long-Term Care Services to estimate the incidence and correlates of elder mistreatment by non-staff members in nursing homes. We combined data from two surveys to increase sample size (N=1,051). Our preliminary results showed that about 10% of family members reported that their relatives were abused by persons in nursing homes that are not staff or caregivers (most probably other residents). Age of the elderly has a negative association with non-staff abuse. Women are significantly more likely than men to be abused by non-caregivers. Having behavior problems more than doubled the odds of non-staff abuse. Experiencing staff abuse multiplied the odds of non-staff abuse by 5.65, a very strong effect. These results demonstrated that non-staff abuse is a significant problem in nursing homes and strongly correlated with staff abuse. More research is needed to identify risk factors of non-staff abuse as well as actions that the nursing home can take to mitigate non-staff abuse.

FEAR OF RETALIATION

I. Reed, J. Robison, *University of Connecticut Health Center, Farmington, Connecticut*

Fear of retaliation is a concept that comes up frequently in much of the literature regarding elder abuse and nursing home abuse. While many studies refer to fear of retaliation, few have focused on the perception the person has experiencing this fear. For individuals who rely on others for assistance with the ADLs or IADLs, there is a belief that if they were to complain, their situation could become worse. A total of 150 residents from 57 supportive housing residences were asked, "Do you worry about retaliation if you were to report a complaint or concern?" In addition to these responses, seven in-depth interviews were conducted with individuals regarding interactions with staff and retaliation. They described what emotions they had when they experienced physical or verbal abuse, and the internal conflicts resulting from deciding whether or not to report the incident. About a fifth (19%) of the total sample do worry about retaliation if they were to report an incident. All of the in-depth interviews reported incidences of retaliation and the different ways individuals responded to the situation. For those who did not report abuse, feelings of hopelessness and despair were expressed. Findings from this study will be used to inform the CT Long Term Care Ombudsman program, Fear of Retaliation Workgroup. They will utilize this information in order to develop videos teaching both residents and staff at nursing homes to recognize and respond to retaliation.

THE AFFECT OF CAREGIVER INTERACTIONS ON DISRUPTIVE BEHAVIORS OF RESIDENTS WITH DEMENTIA IN ALFS

T. Sharpp, *Betty Irene Moore School of Nursing, University of California, Davis, Sacramento, California*

Significance: Assisted living facilities (ALFs) are a prominent source of housing for seniors in the United States. It is estimated that over 50% of the residents in ALFs have some form of cognitive impairment. As caregivers receive little formal education they rely on experience and inherent qualities they possess to provide care to residents with dementia. Purpose: The purpose of this presentation is to describe and analyze the affect of person-centered or me-centered caregivers as they interact with residents with dementia in an ALF. Methods: An ethnographic study was conducted in an ALF that specializes in dementia care. Over 100 hours of participant observation was conducted over a period of six months. Chart reviews were completed on all residents (n=35) and formal and informal interviews were completed with employees (n=20) and family members (n=5). Results: Caregivers interacted in ways that were either person-centered or me-centered. Caregivers who were person-centered demonstrated affection and patience while me-centered caregivers were insensitive to residents and communicated poorly. 64% of the instances of agitated behavior by a resident with dementia occurred during or after an interaction with a me-centered caregiver. Implications: By teaching person-centered care, disruptive behaviors of residents with dementia may be decreased.

SESSION 100 (PAPER)

NURSING HOME STAFFING AND QUALITY OF CARE

QUALITY OF CARE: IMPACT OF NURSE STAFFING ON PROCESSES AND OUTCOMES OF CARE

H. Lee, M.A. Blegen, C. Harrington, *UCSF School of Nursing, San Francisco, California*

In the United States, staffing shortages and inadequate staff expertise were major contributors to many chronic and recurring quality problems in nursing homes. The main purpose of this study was to better understand the effects of nursing home characteristics on quality of care. This paper demonstrated the second aim of the study, which examined multidimensional relationships among organizational characteristics,

nurse staffing levels, and resident outcomes controlling for resources, resident, and market characteristics. This study used secondary data from Online Survey Certification and Reporting (OSCAR) data, Minimum Data Set (MDS) 2.0, quarterly staffing data from the state inspections, and Area Resource File (ARF). The population of 195 nursing homes out of 199 Colorado freestanding homes in 2000 was analyzed. Two-stage least squares regression and ordinary least squares regression models were used for data analysis. Larger nursing homes have significantly lower rates of pressure ulcers, urinary tract infections, and incontinence. Higher RN staffing hours per resident day (hprd) were associated with lower (11%) percentage of pressure ulcers, while RN hours did not have a significant effect on other process and outcome QMs. Higher total staffing hprd were significantly related to higher percentages of three process QMs (catheter and restraint use, and bedfast status). Excess nursing home beds in the Health Service Areas were significantly associated with lower percentages of catheter and restraint use. Given the findings, this study suggests that higher registered nurse (RN) staffing levels can improve quality of care in nursing homes.

DO STABLE NURSING HOME STAFF IMPROVE RESIDENT OUTCOMES?

L. D'Arcy, S.C. Stearns, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Many nursing homes experience high turnover rates among staff providing direct resident care. While low levels of turnover may facilitate selection of quality staff, high staff turnover may have deleterious effects on resident outcomes. This study estimates the effects of two measures of staff stability [turnover among certified nursing assistants (CNAs) in the past three months and the percent of CNAs on staff for more than one year] on five resident outcomes: hospital or emergency room use, pressure sores, falls within 30 days, falls within 180 days, and presence of pain. We use the resident and facility components of the National Nursing Home Survey (NNHS). The 2004 NNHS selected 1,500 of the 16,628 nursing homes in the United States. The facility response rate was 81%. A total of 14,017 residents were sampled from these homes; the resident response rate was 96%. Exclusions for missing data result in an analysis sample of approximately 10,100 residents at 909 facilities, with up to 12 resident observations per facility. The effects of staff stability on resident outcomes are quite modest. Instead, much of the between-facility variation in outcomes not attributable to measured differences in resident case mix severity appears to be associated with unobserved facility characteristics. While reducing turnover and promoting staff retention remain desirable goals for nursing homes, this analysis shows that broader measures of facility quality are likely critical in explaining variation in resident outcomes.

OUTCOMES OF INCREASED NURSE STAFFING POLICIES IN FLORIDA NURSING HOMES: STAFFING LEVELS, QUALITY, AND COSTS

K.S. Thomas, K. Hyer, S. Mehra, *School of Aging Studies, University of South Florida, Tampa, Florida*

In 2001, Florida crafted a nursing home (NH) reform bill requiring staffing mandates. Specifically, facilities were required to gradually increase nurse aides from 1.7 hours per resident day (HPRD) in 2001 to 2.9 HPRD in 2007 and licensed nurse staff from 0.6 HPRD in 2001 to 1.0 HPRD. Using data from 1999-2007 for 650 NHs (specifically the Online Survey and Certification Report, Florida Medicaid Cost Reports, and the Nursing Home Staffing Report) this study examined the impact of the increased nurse staffing on NH direct and indirect care staffing, deficiencies, and Medicaid per diem rates. To meet the new standards, close to 11,000 nursing staff were newly employed in Florida NHs. We also report on the mix of nursing staff and the change in HPRD. This paper provides evidence that Florida NHs' averages for serious deficiencies are lower than the national averages and the improvement followed the introduction of new staffing. Florida Medicaid has paid for

these increases; Medicaid NH reimbursement grew 58% from 1999-2008, with the fastest growing component being direct patient care costs. This paper documents Florida's experience implementing staffing ratios in NHs and provides lessons learned for other states that may consider mandating nursing staff ratios.

STATE NURSE STAFFING POLICY AND QUALITY OF CARE IN NURSING HOMES

N.J. Zhang, L. Unruh, L. Ni, Y. Hong, T. Wan, *Department of Health Management and Informatics, University of Central Florida, Orlando, Florida*

Background: Majority of states has more stringent policies on minimum level of nurse staffing in nursing home than the federal requirements mandated in OBRA 87. The policy continues to change with growing evidence-based knowledge on the relationship between state minimum nurse staffing policy and quality of care. The state policies vary across the staffing measures, type of staffing and civil money penalty. Some state policies are related to the number of residents, more focusing on specific type of nurse, and charge more fine for violation than others. **Objectives:** The aim of this study is to 1) profile the current variation of state minimum nurse staffing policies; 2) examine the effects of state minimum nurse staffing policy and civil monetary penalty on nurse staffing levels; and 3) investigate the impacts of state minimum nurse staffing policy and civil monetary penalty on quality of care in nursing homes. **Research Design:** we conducted a cross-sectional analysis to test the hypotheses using 2007 Online Survey Certification and Reporting Data and Minimum Data Set of all certified U.S. nursing homes. Multiple linear regression and path analysis were used. **Results and Discussions:** state minimum nurse staffing policies have different effects on type and levels of nurse staffing. For example, the policy on RN was not associated with the RN staffing levels across states. The amount of civil monetary penalty has a positively relationship with RN staffing. The association between state policies and resident level quality of care is statistically significant and positive.

SESSION 105 (PAPER)

OLDER DRIVERS

EVALUATION OF POLICIES AND PROCEDURES FOR DETERMINING FITNESS-TO-DRIVE ACROSS CANADA

A. Myers¹, B. Vrkljan², S. Marshall³, R.A. Blanchard⁴, *1. University of Waterloo, Waterloo, Ontario, Canada, 2. McMaster University, Hamilton, Ontario, Canada, 3. Ottawa Hospital, Ottawa, Ontario, Canada, 4. University of Waterloo, Waterloo, Ontario, Canada*

This project was initiated following a national Aging Driver Mobility forum hosted by the Canadian Council of Motor Transport Administrators. There was support in principle that fitness-to-drive should be based on functional assessment of at-risk drivers (rather than age or medical conditions alone), and that conditional licensing may be a desirable alternative to an outright ban for some drivers. However, concerns included costs, operational issues and consequences of falsely labeling drivers as safe or unsafe. To document current policies and practices, e-mail surveys and follow-up interviews are being conducted with two groups of key informants: (1) clinicians who assess drivers referred for medical reasons; and (2) ministry personnel (both medical review and licensing) who decide whether or not to reinstate licenses (with or without restrictions). Results to date indicate substantial variability across the 13 provinces and territories with respect to: ministry approval of driver assessment centers, accessibility, wait times and costs (ranging from \$65 to \$800) for drivers, qualifications of clinical assessors, assessment procedures (off and on-road), and how clinical results inform licensure decisions. Findings will be added to the searchable database being developed by the AAA Foundation for Traffic Safety which thus far only includes policy data for US states. Most importantly, results will assist

policy makers in making informed decisions on issues such as expanding conditional licensing or adopting potentially less costly approaches for driver assessment. Ultimately, the goal is to ensure fair and equitable licensure decisions for drivers, regardless of where they reside in Canada.

CHARACTERISTICS, PERCEPTIONS AND PATTERNS OF LOW MILEAGE OLDER DRIVERS

R.A. Blanchard, A. Myers, *University of Waterloo, Waterloo, Ontario, Canada*

Proponents of the low mileage bias assert that drivers of any age reporting < 3,000 km have higher crash rates than those who drive >14,000 km/year. However, only a few studies (e.g., Keall & Frith, 2006) have examined the driving patterns and characteristics of low mileage older drivers using self-report methods. The current study extended this work using vehicle data for seven consecutive days from 58 drivers, aged 67 to 92 (mean 80). Participants completed daily activity diaries, the Driving Comfort and Perceived Abilities Scales, and an interview. Adjusted to one week, 29% fell into the low, 48% middle and 23% into the high mileage groups. Contrary to prior findings, the low mileage group overestimated (mean 32.7 km), while the high mileage group underestimated (mean -17.8 km) their distance driven over the week. Vehicle data showed that the low mileage group drove less in challenging situations ($p < .001$), made fewer trips ($p < .001$), drove proportionately less on rural roads ($p < .001$), highways ($p < .001$) and freeways ($p = .05$) and traveled closer to home with smaller average ($p < .001$) and maximum ($p < .001$) radii. Those with an average radius of ≤ 5 km also made fewer social but more medical trips. Low mileage drivers were more likely to live in urban areas and with a spouse ($p < .05$), had lower nighttime driving comfort scores ($p < .001$), poorer perceived abilities ($p < .05$) and higher avoidance scores ($p < .01$) than high mileage drivers. This study highlighted the importance of examining older driver characteristics and perceptions for understanding self-regulation.

THE IMPACT OF FORMAL AND INFORMAL TRANSPORTATION SUPPORT ON THE DECISION MAKING OF DRIVING CESSATION AMONG COMMUNITY-DWELLING OLDER ADULTS

M. Choi, K.B. Adams, E. Kahana, *Case Western Reserve University, Cleveland, Ohio*

The study aims to examine the impact of formal and informal transportation support on the decision making of driving cessation among community-dwelling older adults. Data were obtained from three waves of the Florida Disability Study (1990-1992). The study population consists of generally healthy community-living old-old persons residing in Florida retirement communities. We restricted our sample to those who were driving at baseline ($N = 604$). Respondents had a mean age of 78.3 at baseline, and 62% of older drivers were female. A discrete-time multivariate hazard model was used to examine the impact of transportation support on driving cessation while controlling sociodemographic characteristics (age, gender, and education) and health conditions (comorbidity, hospitalization history, functional impairment, and vision impairment). Transportation support from spouse, family members, friends and neighbors were categorized into informal transportation support. Formal transportation support included transportation support that respondents had received from organizations and hired assistants. The results showed that both formal and informal transportation support influenced older adults to cease their driving even after controlling sociodemographic factors and health conditions. The statistically significant transportation support influencing driving cessation was from friends and neighbors ($OR = 1.81, p < .001$), hired assistants ($OR = 1.65, p < .01$), and spouse ($OR = 1.39, p < .01$). Transportation support from family members and organizations was not statistically significant. These results imply that accessibility of alternative transportation is important in older adults' decision making of driving cessation given the limited

routes of transportation provided by organizations and the restricted availability of rides offered by family members.

LIMITED CONGRUENCE BETWEEN THE ROADWISE REVIEW DETERMINATION OF SAFETY TO DRIVE AND ON-ROAD EVALUATIONS

M. Bedard^{1,2,3}, J. Riendeau¹, B. Weaver^{1,2}, M. Porter⁴, 1. *Public Health Program, Lakehead University, Thunder Bay, Ontario, Canada*, 2. *Northern Ontario School of Medicine, Thunder Bay, Ontario, Canada*, 3. *St. Joseph's Care Group, Thunder Bay, Ontario, Canada*, 4. *University of Manitoba, Winnipeg, Manitoba, Canada*

The Roadwise Review (RR) CD-ROM has been proposed as one way for older drivers to self-evaluate the skills that support safe driving. Further validation of RR vis-a-vis actual driving scores is needed. To that end, we contrasted the results of RR with those of on-road performance (based on demerit points) in 30 older drivers (mean age = 73.9, SD = 5.6). We also examined correlations between Roadwise Review versions and original versions of UFOV 2 and the Trail Making Test (TMT). The number of mild or serious problems identified by RR ranged from 0 to 7 (mean = 2.1, SD = 1.4). The number of driving test demerit points ranged from 15 to 80 (mean = 49.1, SD = 19.6). The correlation between the number of problems and demerit points was .17 ($p = .376$). We further divided the demerit points into five sub-domains (e.g., turning). Correlations between the number of problems and demerit points ranged from -.15 to .41; only the latter (for "moving in the roadway") was statistically significant ($p = .026$). The correlation between the RR UFOV and subtest-2 of the actual UFOV was .20 ($p = .318$). The correlation between the RR TMT and the sum of the original TMT A and B was .29 ($p = .119$). These results indicate a lack of convergence between findings obtained with RR and actual performance using standardized approaches, and point to the importance of post-market-evaluation of material aimed at older drivers.

SESSION 110 (SYMPOSIUM)

THE NEW NATIONAL RESOURCE CENTER FOR PARTICIPANT-DIRECTED SERVICES: A RESEARCH DRIVEN ORGANIZATION

Chair: L. Simon-Rusinowitz, *Health Services Administration, University of Maryland School of Public Health, College Park, Maryland*

Discussant: P. Doty, *US DHHS ASPE, Washington, District of Columbia*

The Cash and Counseling Demonstration and Replication projects have produced extensive evaluation findings and "lessons learned" about designing and implementing this participant-directed model of providing personal care services. Based on more than 10 years of experience, the new National Resource Center for Participant-Directed Services (NRCPS) at Boston College offers research-based services to assist all programs, regardless of funding source, to develop and improve their participant-directed services. Previous and current research informs the Center's services, including training and technical assistance. Services may address needed support such as counseling and fiscal management, developing performance measures, and continuous quality improvement. The Center also maintains a pulse on policy issues impacting participant-directed services and establishes meaningful ways in which program participants contribute to all aspects of Center programming. Lori Simon-Rusinowitz will begin the symposium with an overview of Center research priorities. Next, Mark Sciegaj will present findings from an inventory of participant-directed programs. Dr. Simon-Rusinowitz will also present findings from a pilot ethnographic study of Cash and Counseling consumers with mental health diagnoses. Kevin Mahoney will present an overview of the Center, introduce new participant-directed programs funded by the Administration on Aging and Veterans Administration, and, discuss ideas for further program evaluation. Finally,

Pamela Doty, of the US DHHS, will discuss the Center's planned contributions to help expand the availability of participant-directed programs nationwide.

BETTER TRAINING, BETTER CARE: IDENTIFYING TRAINING NEEDS OF CAREGIVERS AND OLDER CONSUMERS WITH MENTAL HEALTH DIAGNOSES IN A CONSUMER-DIRECTED PERSONAL CARE PROGRAM

L. Simon-Rusinowitz, K. Ruben, *Health Services Administration, University of Maryland School of Public Health, College Park, Maryland*

With a growing elderly population, there is an increased need for caregivers to assist disabled elders with daily living activities that may allow them to remain in their homes. Disparities in quality of home health care exist for minority elders; especially for individuals with mental health issues. There is also a nationwide shortage of caregivers and difficulty recruiting and retaining these workers. A consumer-directed (CD) approach allows for greater flexibility and control of personal care services, and may increase the satisfaction and well-being of caregivers and elders with mental health diagnoses. There is, however, a need to develop training informed by the views of consumers and caregivers to enhance CD services. To develop a pilot training program, we are conducting in-depth interviews with consumer teams to better understand their needs, and ultimately lead to better outcomes. This study will build on current research and contribute to plans for a larger project.

AN INVENTORY OF SELF-DIRECTED HOME AND COMMUNITY-BASED PROGRAMS

M. Sciegaj, *Health Policy and Administration, Penn State University, University Park, Pennsylvania*

Self-direction is a philosophy and orientation to the delivery of home and community-based long-term care that enables individuals' flexibility of choice and control in managing their disability-related supportive service needs. At a minimum, the self-directed services model allows persons with disabilities of all ages or their representatives to select and dismiss the individuals who are paid to provide assistance with basic and instrumental activities of daily living and other disability-related supportive services. Such programs have grown considerably over the past decade. In January 2009, the National Resource Center for Participant-Directed Services began collecting detailed information and conducting key informant interviews about such programs. The purpose of this study is to develop a descriptive inventory of publicly funded programs offering self-directed home and community-based personal assistance services. This presentation focuses on self-directed programs serving elders and adults with disability that are funded by Medicaid.

THE NEW NATIONAL RESOURCE CENTER FOR PARTICIPANT-DIRECTED SERVICES: PROGRAM OVERVIEW

K.J. Mahoney, *GSSW, Boston College, Chestnut Hill, Massachusetts*

The new National Resource Center for Participant-Directed Services (NRCPS) at Boston College offers research-based services to assist all programs, regardless of funding source, to develop and improve their participant-directed services. Previous and current research informs the Center's services, including training and technical assistance. Services may address needed support such as counseling and fiscal management, developing performance measures, and continuous quality improvement. The Center also maintains a pulse on policy issues impacting participant-directed services and establishes meaningful ways in which program participants contribute to all aspects of Center programming. Kevin Mahoney will present an overview of the Center's research-driven services, introduce new participant-directed programs funded by the Administration on Aging and Veterans Administration, and, discuss ideas for further program evaluation.

UNDERSTANDING THE UNIQUE CHALLENGES OF LIVING WITH EARLY ONSET DEMENTIA FOR THE PERSON AND THE FAMILY

Chair: P. Harris, *Sociology, John Carroll University, Cleveland, Ohio*

Discussant: L. Snyder, *University of California, San Diego, San Diego, California*

There has been a growing awareness over the last five years, that research on a subgroup of the dementia population, people with early onset dementia, has been very limited. In order to reverse this trend, in 2006 the Alzheimer's Association conducted an epidemiological study that revealed that in the US alone between 220,000 and 640,000 individuals under age 65 have some type of dementia, and the study urged further examination of the unique needs of this population. This symposium focuses on five issues related to this group. Roach, Keady, and Bee discuss a unique methodology for gathering evidenced-based data about the family experience. Researchers and families in the UK co-constructed family biographies to deepen the understanding of the impact of the diagnosis on family functioning. Keady, Clarke, and Wilkinson focus on a group of early onset individuals that is often overlooked, people with alcohol-related dementia, examining their lived experiences. Cox's study explores the affect of the diagnosis on people in the work place, who are still trying to financially support their young families. Harris examines one of the most intimate aspects of a marital relationship, a couple's sexual relationship, once a diagnosis of dementia is pronounced. Finally, Morhardt using multi-methods rounds out the symposium by discussing the overall educational and service needs of caregiving families across many dimensions from work to relationships. Together these studies deepen our understanding of the challenges of living with early onset dementia. This symposium is sponsored by the Alzheimer's disease Interest Group

INTIMACY, SEXUALITY AND EARLY ONSET DEMENTIA: THE CHANGING MARITAL RELATIONSHIP

P. Harris, *Sociology, John Carroll University, Cleveland, Ohio*

When one's marital partner receives a diagnosis of dementia, it has major ramifications for a couple. Such a diagnosis affects every aspect of marital life, including the most intimate areas. This impact is even more stressful when the diagnosis occurs in individuals below the age of 65, for studies have shown that this group has unique challenges. This qualitative study: 1) focuses on the perspectives of married couples, caregivers and their spouses in the early stage of early onset dementia, as they discuss their intimate relationships, both positive and negative aspects, 2) identifies how they cope with these changes to their marital relationship, and 3) develops evidenced-based recommendations for other couples in the early stages of dementia, and for their health care providers. Data were collected through 8 focus groups, four with caregivers and four with people with dementia.

ALCOHOL-RELATED BRAIN DAMAGE: SHARING STORIES, LIVING LIVES

J. Keady¹, C.L. Clarke², H. Wilkinson³, 1. *School of Nursing, Midwifery and Social Work, The University of Manchester, Manchester, United Kingdom*, 2. *Northumbria University, Newcastle-upon-Tyne, United Kingdom*, 3. *Edinburgh University, Edinburgh, United Kingdom*

This paper will provide an understanding about the experience of living with alcohol-related brain damage (ARBD) from individual accounts of 6 people diagnosed with the condition and resident in a specialist rehabilitative care unit in the UK. Participants were aged between 39-58 and all had been in the unit for at least 8 weeks prior to the interview and abstinent from alcohol for at least this duration of time Using a narrative research approach built around storyline generation, 3 storylines were generated that encapsulated the experience of living with ARBD, namely: Five Minute Memory; Fractured Lives; and Believing

in Recovery. Each of these storylines will be addressed during the presentation. The paper will conclude with a discussion on the practice implications of the study where the importance of health education and the promotion of self-management, such as through the use of orientation prompts, will be highlighted.

THE EXPERIENCES OF YOUNGER ONSET PERSONS WITH AD IN THE WORKPLACE: FINDINGS FROM A SURVEY OF YOUNGER ONSET PERSONS

C. Cox, *Fordham University, New York, New York*

Many people with AD are still employed and it is often at the workplace that symptoms are first noticed. Frequently, these persons lose their jobs as a result of their impairment and thus their primary source of income. Younger persons with AD are frequently raising young families with many financial commitments and expenses. Losing employment can impact self-esteem and potentially stress relationships as persons must confront a significant life change. Employers may be held responsible for making accommodations for these workers. However, the extent to which this is done is not clear nor are the persons' responses to such accommodations. This presentation reports on the findings of a survey of over 30 persons with early onset AD and their experiences at the workplace including the responses of their employers, types of accommodations that were made, and subsequent well-being. The types of services and programs that these persons need to assist them with regards to their employment are also discussed

WORKING TOGETHER: YOUNG ONSET DEMENTIA AND FAMILY EXPERIENCES

P. Roach, J. Keady, P. Bee, *School of Nursing, Midwifery and Social Work, University of Manchester, Manchester, United Kingdom*

To date, the dementia care literature has focused on the subjective experience of living with dementia, the experience of primary carers or the experience of the dyad. This study takes a more inclusive view of families and asks younger people with dementia to nominate (up to) 5 members of their family for participation in the study. This work is being undertaken in Greater Manchester, UK. In order to construct a family biography, recruited families are being visited over a period of 12-18 months with visits by the primary presenter occurring every 2-3 months. These visits consist primarily of group interviews with the families, whilst allowing for non-textual data collection (e.g. photographs, drawings) and flexible interviewing arrangements to be made. In addition to discussing the emergent findings, the presentation will consider the challenges of collecting, presenting and analysing biographical data when working with family groups.

EARLY ONSET DEMENTIA: SERVICE AND EDUCATION NEEDS OF CAREGIVING FAMILIES

D.J. Morhardt¹, R.L. Beard², J. Urbanic³, 1. *Cognitive Neurology and Alzheimer's Disease Center, Northwestern University, Chicago, Illinois*, 2. *College of the Holy Cross, Worcester, Massachusetts*, 3. *Rush University Medical Center, Chicago, Illinois*

It is estimated between 220,000 and 640,000 individuals under age 65 have a dementia. Little research exists documenting service and education needs of this group. Evidence suggests that younger persons with dementia have different needs than older and data is needed to better understand their experience. In-home interviews (N=15), survey (N=30) and focus group (N=7) with caregivers of persons with early onset dementia (EOD) were conducted. Seventy percent (36) cared for a person with FTD, 21% (11) AD and 10% diagnosis pending. Qualitative analysis revealed the following areas of concern: 1) Experience with services and the healthcare system, 2) Coping with symptoms, 3) Financial issues, 4) Social support, 5) Loss of relationship, 6) Impact on dependent children, 7) Changes in Career and Retirement Plans; and 8) Lack of public awareness of disease. Further documentation of these

issues needed to develop appropriate interventions, policy and programs for EOD individuals and families.

SESSION 120 (SYMPOSIUM)

WORKER INJURIES IN LONG-TERM CARE

Chair: N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Discussant: J. Wiener, *RTI International, Washington D.C., District of Columbia*

The long-term care workforce consists of hundreds of thousands of workers. For example, in nursing homes care is provided by a labor force consisting mostly of about 1.4 million nurse aides. However, long-term care workers have some of the most hazardous jobs in the U.S. For example, nurse aides suffer a higher prevalence (18.8%) of work related back pain than any other category of worker. The overall injury rate for nurse aides is second among all industries. Injuries have important implications, including the health of the worker and lost work days for the industry as a whole. However, despite the very high rates of injuries in long-term care, and the large numbers of workers, very few studies have examined these injuries. In this symposium, research will be presented that expands our understanding of injuries in long-term care settings, including an analysis of workers compensation claims for nurse aides and nurse aide injuries in nursing homes.

A LONGITUDINAL VIEW OF WORKPLACE INJURIES IN NURSING HOMES

N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Little is known about lost workday injuries in nursing homes. In this research, data from a large panel of nursing homes were used to examine the association between workplace injuries and organizational factors, caregiver staffing levels, and quality. Occupational Safety and Health Administration data initiative, the OSCAR, and ARF data were used (from 2002 through 2006). For the organizational characteristics of interest, for-profit facilities were less likely to report high injury rates and facilities with a higher average occupancy were more likely to report high injury rates. For the staffing characteristics of interest, facilities with high staffing levels of nurse aides were less likely to report high injury rates. For the quality characteristic of interest, facilities of low quality were more likely to report high injury rates. Workplace injuries are associated with organizational, caregiver, and quality characteristics of nursing homes. This may present an opportunity to reduce high injury rates.

SELF-REPORTED ON-THE JOB INJURIES AMONG CERTIFIED NURSING ASSISTANTS IN NURSING HOMES

G. Khatutsky, *Aging, Disability and LTC, RTI, International, Waltham, Massachusetts*

Certified nursing assistants working in nursing homes are at significant risk for work-related injury, but little is known about the frequency and types of such injuries, as well as how technology such as patient lifts affects injury rates. Aside from the direct impact on workers, understanding the prevalence and nature of injuries is important for assessing their impact on productivity, retention and job satisfaction. This study uses 2004 data from the National Nursing Assistant Survey and the National Nursing Home Survey to describe the prevalence, nature and predictors of these injuries and assesses their impact on CNA job satisfaction and intent to leave the workplace. Analysis suggests that 59 % of nursing assistants reported work-related injuries, with 17% specifying back injuries and over 15% - other strains and pulled muscles. Multivariate results indicate that younger age, mandatory overtime, and poor job preparedness increase the likelihood of being injured.

DOCUMENTING OCCUPATIONAL INJURIES AMONG PERSONAL CARE WORKERS

T. Scherzer, *Social & Behavioral Sciences, University of California, San Francisco, San Francisco, California*

Personal care workers provide critical support to elderly and disabled persons living at home or in community settings, and comprise one of the largest and fastest growing workforces. Prior research documents difficult working conditions and widespread occupational injury. However, numerous barriers prevent assessing the prevalence of injury. Beyond personal reluctance to report injury, structural barriers for personal care workers may stem from employment arrangements in which they are hired directly by individuals, including family members in many publicly-funded programs. As the personal care workforce grows, it is important to understand the prevalence of injury and the barriers for addressing and reporting injury. The paper will focus on results from two studies of directly-hired workers in California's Medicaid personal care program: (1) a survey of workers that assesses the prevalence, consequences, and barriers to reporting occupational injuries, and (2) a qualitative study of injured workers' experiences.

SESSION 125 (POSTER)

BS POSTER SESSION I - FACE-TO-FACE TIME: 1:00 PM - 2:30 PM

CORTISOL AND 6-YEAR CARDIOVASCULAR MORTALITY

N. Vogelzangs¹, A. Beekman¹, Y. Milaneschi², L. Ferrucci³, B. Penninx¹, *1. Psychiatry and the EMGO Institute for Health and Care Research, VU University Medical Center, Amsterdam, Netherlands, 2. Tuscany Health Regional Agency, Florence, Italy, 3. Clinical Research Branch, National Institute on Aging, Baltimore, Maryland*

Introduction: The stress hormone cortisol has been linked with unfavorable cardiovascular risk factors, but longitudinal studies examining whether high levels of cortisol predict the onset of cardiovascular mortality are largely absent. **Methods:** In a sample of 874 participants aged 65 years and older of the InChianti Study we examined the association of 24-hour urinary cortisol levels with all-cause and cardiovascular mortality during 6 years of follow-up. Cardiovascular mortality included deaths due to ischemic heart disease and cerebrovascular disease. **Results:** During a mean follow-up of 5.7 (SD=1.2) years, 184 persons died, of whom 41 from cardiovascular disease. After adjustment for sociodemographics, lifestyle behaviors, depressive symptoms, number of chronic diseases and baseline cardiovascular disease, 24-h urinary cortisol levels did not increase the risk of all-cause mortality (HR per SD increase=1.06, 95%CI=0.91-1.23, p=.45), but did increase cardiovascular mortality risk (HR per SD increase=1.34, 95%CI=1.03-1.76, p=.03). This effect was found to be consistent across persons with and without cardiovascular disease at baseline (p interaction=.89). **Discussion:** High cortisol levels predict cardiovascular death among both persons with and without pre-existing cardiovascular disease. The specific link with cardiovascular - and not all-cause - mortality suggests that high cortisol levels might be particularly damaging to the cardiovascular system.

A TOOLBOX FOR SUCCESS: MEETING THE NEEDS OF MEN AND THEIR PARTNERS AFTER RADICAL PROSTATECTOMY

B.A. Weber, *University of Florida, Gainesville, Florida*

Forty-million men are approaching or have attained 50 years, the age when prostate cancer begins to emerge and eventually becomes the most prevalent cancer in American men. Clinical practice guidelines do not provide information about daily management of surgery side effects. Thus, men recovering from the gold standard surgical treatment for prostate cancer have to deal with severely debilitating urinary incontinence, erectile dysfunction, and psychosocial consequences on their

own or with partners who do not know how to support them. No research, to date, is focused on providing tangible support in the form of products and information. In this study, 30 men and their partners will be provided a prostate cancer Survivor's Toolkit that will contain a variety of products and information designed to help these men and their partners deal with treatment side effects. Outcomes will focus on (1) variation in needs over time, (2) self-efficacy, depression, uncertainty and satisfaction with care, (3) and Toolkit usefulness. Descriptive statistics will be used to assess the participant response to the Toolkit. A one-way ANOVA test will be performed to assess differences among the time since surgery groups for Needs Assessment Factors: Men's Needs, Partner's Needs (2 subscales), Physical Dysfunction and Associated Bother, and The Survivor's Toolkit Usefulness; and Psychological Factors: Self-efficacy, Depression, Uncertainty, Satisfaction with Care, and Having Choices and Making Choices. Significant ANOVA tests will be followed up with pair-wise t-tests to more precisely locate the potential differences. Information provided by men and their partners will be used to streamline the Toolkit to contain only those products considered most useful, making it a low-cost strategy that can be easily translated into practice in busy clinical settings.

ALTERATIONS IN MITOCHONDRIAL FUEL METABOLISM AND SURVIVAL WITH REDUCED MANGANESE SUPEROXIDE DISMUTASE (SOD2)

H. Lum^{1,2}, T.R. Koves^{2,1}, K.L. DeBalsi², O. Ilkayeva², H. Van Remmen³, D.M. Muoio², 1. *Geriatric Medicine, Duke University, Durham, North Carolina*, 2. *Sarah W. Stedman Nutrition and Metabolism Center, Durham, North Carolina*, 3. *University of Texas Health Sciences Center, San Antonio, Texas*

Mitochondria, often called the "powerhouse" of a cell, are also a primary source of cellular reactive oxygen species, a fundamental element of the free radical theory of aging. Here, we examine the interplay between skeletal muscle mitochondrial function, metabolism and oxidative stress using mice haploinsufficient for the free radical scavenger, manganese superoxide dismutase (SOD2). Although these mice have lower ATP production and decreased exercise tolerance compared to wild-type controls, their lifespan is not compromised. To date, SOD2[±] mice have only been characterized in the context of a low fat diet. We hypothesized that high fat feeding might increase production of reactive oxygen species and thereby reveal susceptible metabolic pathways that account for the weakened bioenergetics in heterozygous mice. To this end, SOD2[±] mice and their wild-type littermates were fed either a high fat or standard chow diet for 24 weeks. Diet-induced weight gain was similar between genotypes, whereas the development of glucose intolerance was slightly more severe in SOD2[±] mice. Consistent with our predictions, high fat feeding decreased the survival rate from 100% in wild-type mice to 50% in SOD2[±] mice. Comprehensive metabolic profiling revealed accumulations of long, medium as well as short chained acylcarnitines (by-products of incomplete beta oxidation) in skeletal muscle of high fat fed SOD2[±] mice. Interestingly, the opposite pattern was evident in liver. Thus, ablation of SOD2 appears to provoke tissue-specific perturbations in β -oxidation and perhaps the TCA cycle. Assessment of specific mitochondrial enzyme activities is currently underway.

A BIOMARKER OF LONGEVITY IN C. ELEGANS: ASSOCIATED PHENOTYPES

T. Johnson, J.R. Cypser, P. Tedesco, D. Wu, T. Ishii, S. Park, *IBG, University of Colorado, Boulder, Colorado*

Expression of a Phsp-16::gfp fluorescent reporter transgene is a strong predictor of improved survival and stress resistance even within isogenic populations of the nematode *C. elegans* (Rea et al, 2005 *Nature Genetics* 37, 894). Here we examine other characteristics of animals displaying "bright" or "dim" expression of this Phsp-16.2::gfp reporter and ask whether those characteristics are likewise associated with

improved survival. Animals expressing higher levels of hsp-16.2 display greater mobility during early adulthood (greater mobility is associated with increased longevity), but this mobility difference is lost fairly rapidly. Measurements of fertility indicate that animals expressing lower levels of hsp-16.2 do not exhibit lower fertility, as might be expected if they were somehow debilitated and thus short-lived for uninteresting reasons. We used micro arrays to investigate what genes are differentially expressed in bright and dim animals, and found that very few genes are differentially expressed; only four additional heat shock genes are more highly-expressed in bright, longer-lived animals. We also found some evidence for inheritance of overall expression level of this Phsp-16.2::gfp reporter; bright worms have brighter progeny than do dim worms, even in isogenic populations. (This work was supported by grants from the NIH.)

CD8+ LYMPHOCYTES FROM INDIVIDUALS WHO HAVE RECOVERED FROM WNV POSSESS UNIQUE "AGE" PHENOTYPE

A.M. Wertheimer^{1,3}, S. Griffiths⁵, S. Njoroge³, K.O. Murray⁴, A.N. Akbar⁵, J. Nikolich-Zugich^{1,2,3}, 1. *University of Arizona - Arizona Center on Aging, Tucson, Arizona*, 2. *University of Arizona - Immunobiology, Tucson, Arizona*, 3. *Vaccine and Gene Therapy Institute, Portland, Oregon*, 4. *University of Texas Health Science Center at Houston, Houston, Texas*, 5. *University College London, London, London, United Kingdom*

We are measuring three immunological parameters which have each separately been found associated with impaired immunity and/or decreased longevity in experimental animals and humans: T-cell naïve/memory ratios (by 8-11 color flow cytometry), number of T-cell clonal expansion (TCE) and exposure to CMV. Low T-cell naïve/memory ratios, high number of T-cell clonal expansions (TCE) and CMV exposure are hypothesized to represent separately or together, risk factors for poor immunity and, perhaps, for increased WNV susceptibility. We have initiated our measurement and evaluation of T-cell naïve/memory ratios within our cohort of WNV-exposed and age matched healthy human subjects. Whole blood was processed using cell preparation tubes (CPT tubes (BD)) to obtain peripheral blood mononuclear cells which were stained for assessment of a variety of markers including those to determine both CD4⁺ and CD8⁺ naïve (CD28^{int}CD95^{low}) or CD45RA⁺CD27⁺; central memory (CD28^{hi}CD95^{hi}) or (CD45RA⁺CD27⁺); and effector memory (CD28^{neg}CD95^{hi}) or (CD45RA⁺CD27⁻) populations. We assayed 20 WNV- exposed and 20 age matched healthy control healthy old (65+ yrs) controls and found that the CD8⁺ effector memory population ratios are significantly lower for the WNV- exposed vs. respective age matched control population and that total CD8⁺ and CD8-CD4⁻ telomere length is significantly shortened in the WNV-exposed individuals p value<0.05 (unadjusted). In addition, staining with Ki67 a marker for cell division, revealed that CD8⁺ effectors (memory and revertant) T cells have significantly lower turnover in WN⁺ vs. healthy controls. Whether this is a primary consequence of aging or a secondary consequence of WNV infection remains to be elucidated.

GENETIC REGULATION OF FEMALE SEXUAL MATURATION AND AGING

R. Yuan, Q. Meng, D. Harrison, B. Paigen, *The Jackson Laboratory, Bar Harbor, Maine*

A longstanding evolutionary theory of aging proposes that genes that regulate female sexual maturation also control lifespan. To test this hypothesis, at the Jackson Laboratory, we investigate the longevity and age of female sexual maturation, by observing the age of vaginal patency of 32 inbred strains, including domesticated and wild derived inbred strains. Our results show that the age of vaginal patency varies considerably among inbred strains, suggesting sexual maturation is a complicated trait and regulated by multiple genetic loci. Wild strains have significantly delayed age of sexual maturation than domesticated inbred

strains, indicating the alleles that delay sexual maturation might be excluded during the process of domestication but reserved in wild strains, whose ancestors were not domesticated. Correlation study shows a positive correlation between the age of vaginal patency and the median life spans of the 32 inbred strains ($R^2=0.17$, $p=0.05$), suggesting the existence of common genetic mechanisms that co-regulate processes of sexual maturation and aging. Haplotype association mapping study suggests three loci, one on Chr4 and two on Chr16, that are significantly associated with the age of vaginal patency. Interestingly, the wild strains have the same alleles at all these three loci but different from other domesticated inbred strains, supporting the idea that wild strains carry alleles that may delay sexual maturation. In vivo genetic studies are ongoing to test the effects of these alleles on sexual maturation and longevity.

PITUITARY-THYROID FUNCTION CHANGES IN OLD RATS INDUCED BY VALPOIC ACID

T.J. Theodoropoulos, J. Vriani, *USF/VA, Bay Pines, Florida*

Valpoate (VPA) differs in structure from the other anti-epileptics. It exerts its effect through gamma-aminobutyric acid (GABA), which may influence pituitary hormone secretion. The clearance of VPA is reduced in the elderly. In this study, VPH 50mg/kg or diluent were given i.p. daily for 30 days in old male rats. Blood was collected for hormone determinations. Serum levels of T4, free T4 and free T3 were normal in all animals. Serum T3 and TSH levels were slightly decreased in the experimental group. After challenge with TRH 50ngIV, the increment of serum TSH at 10 min. was lower in the VPA group. (5.6 ± 2.4 vs. 8.8 ± 2.2 , mcU/ml, $p<0.02$). This data suggests an inhibitory effect of VPH on TSH secretion in the old animal, presumably through GABA. The lower T3 may be due to plasma protein displacement by the drug.

CHANGES IN MITOCHONDRIA ULTRA-STRUCTURE IN A FRAIL MOUSE MODEL

F. Ko¹, M. Zauher¹, H. Yang¹, C. Cooke², N.S. Fedarko¹, J.D. Walston¹, *1. Division of Geriatrics and Gerontology, Johns Hopkins University School of Medicine, Baltimore, Maryland, 2. Microscope Facility, Johns Hopkins University School of Medicine, Baltimore, Maryland*

Background. Genes related to decreased mitochondrial function and increased apoptosis are up-regulated in skeletal muscles of older IL-10tm/tm frail mice compared to age-matched C57BL/6J controls. We hypothesized that these changes are associated with ultra-structure changes in skeletal muscle mitochondria morphology and sought to characterize mitochondrial differences between the IL-10tm/tm frail mice and age-matched C57BL/6J controls. Methods. Transmission electron microscopy (TEM) was performed on the hind leg skeletal muscles of 90-week-old female IL-10tm/tm ($n=5$) and C57BL/6J ($n=5$) mice. Ten representative photomicrographs at 20,000X magnification were captured from duplicate sections per mouse. Coded photographs were used for mitochondria quantification by a blinded rater. Mitochondria morphology was classified as abnormal if the mitochondrion showed high luminosity due to cristae depletion and matrix dissolution. Mean percentages of abnormal mitochondria in IL-10tm/tm and C57BL/6J mice were tested for statistical significance by two-tailed t-test. Results. 90-week-old female IL-10tm/tm frail mice showed significantly more abnormal mitochondria with cristae depletion and matrix dissolution compared to age- and gender-matched C57BL/6J mice ($17.01 \pm 13.28\%$ vs. $8.88 \pm 8.70\%$, p value < 0.001). Conclusion. Although abnormal mitochondria morphology is present in the skeletal muscles of very old IL-10tm/tm and C57BL/6J mice, abnormal mitochondrial ultra-structure is twice as common in the IL-10tm/tm mice as in control mice. Given that frail mice have significantly higher markers of systemic inflammation and evidence of shifts toward gene expression that drive apoptosis, further studies of the influence of chronic inflammation and/or accelerated apoptosis on mitochondrial structure and function are indicated.

SESSION 130 (SYMPOSIUM)

THE SEARCH FOR ANTI-AGING MEDICINES

Chair: R. Miller, *University of Michigan, Ann Arbor, Michigan*

Discussant: R. Miller, *University of Michigan, Ann Arbor, Michigan*

A drug that could slow the human aging process to the same extent that caloric restriction or pituitary dwarfing genes do for mice would extend healthy lifespan by about 10-fold more than a cure for cancer or heart disease. The scientific search for effective anti-aging medications has to tread the narrow path between the hype of hucksters and the hopeless pessimism of most scientists and expert commentators. This session will feature four perspectives on this touchy topic. Roger McCarter will review the 70 years of literature on caloric restriction, to summarize which proposed CR mechanisms have been ruled out, and which are still plausible. David Allison will provide a critical discussion of strategies aimed at discovering pharmaceuticals that might mimic the beneficial effects seen in calorically restricted rodents. Matt Kaeberlein will discuss sirtuin activators, including resveratrol, weighing reasons for enthusiasm against reasons for caution. Richard Miller will present the most recent findings on the NIA Interventions Testing Program, including data on NDGA, aspirin, and rapamycin as well as other agents in the ITP screening system.

NIA'S INTERVENTION TESTING PROGRAM – SCREENING FOR ANTI-AGING DRUGS

R. Miller, *University of Michigan, Ann Arbor, Michigan*

The National Institute on Aging has organized a multi-site study of drugs that might extend lifespan in genetically heterogeneous mice. Of the seven agents for which complete information is available, two (aspirin and nordihydroguaiaretic acid) lead to significant increase in lifespan in males, and one other, rapamycin, leads to an increase in maximal longevity in both males and females, with significant increases at all three test sites. This progress report will include an update on these and the other test agents, which are listed at <http://www.nia.nih.gov/ResearchInformation/ScientificResources/CompoundsInTesting.htm>. Key collaborators: Nancy Nadon, David Harrison, Randy Strong.

CALORIC RESTRICTION: HAVE WE ELIMINATED ANY MECHANISMS YET?

R.J. McCarter, *Biobehavioral Health, Penn State University, University Park, Pennsylvania*

The importance of caloric restriction (CR) is that it represents the most robust environmental manipulation known to alter aging processes. The problem with CR is that it changes the entire metabolic profile over the lifespan. It is indeed remarkable that reducing the quantity of food eaten results in a qualitative change in characteristics of metabolism. This complexity of change makes it difficult to identify mechanisms of action of CR and, by implication, mechanisms of aging. Evidence for and against currently suggested mechanisms of CR will be discussed, including that associated with changes in body composition, metabolism, physical activity, plasma metabolites and hormone actions. The conclusion is that several of these are not major components of mechanism. However, integration by CR of metabolic pathways into less damaging characteristics of living results in elevated functional set point and reduced rate of aging.

ARE SIRTUINS GOOD TARGETS FOR TREATING AGE-ASSOCIATED DISEASES?

M. Kaeberlein, *Pathology, University of Washington, Seattle, Washington*

Sirtuins are a family of NAD-dependent protein deacetylases and ADP-ribosyltransferases homologous to the yeast Sir2 histone deacetylase. Sirtuins promote longevity in yeast, worms, and flies, and may play a role in the response to dietary restriction. Recently, the mammalian

sirtuin, SirT1, has been implicated in a variety of age-associated diseases in mice, and chemical modifiers of SirT1 activity are currently under development and testing in clinical trials. The most notable SirT1 activator is resveratrol, a naturally occurring compound found in grapes and red wine. Although it remains unclear whether resveratrol or SirT1 are relevant for human aging, evidence from model organisms suggests that targeted activation or inhibition of SirT1, and perhaps other sirtuins, may prove therapeutically useful toward a subset of age-associated diseases in people.

METHODOLOGIC ISSUES IN TESTING FOR THE ANTI-AGING EFFECTS OF CALORIC RESTRICTION MIMETICS

D.B. Allison, *Biostatistics, The University of Alabama at Birmingham, Birmingham, Alabama*

Longitudinal and lifespan studies, including those done with caloric restriction, present multiple challenges. These include questions about how to accommodate potential nonproportionality in the hazard ratios, how to test for effects on “maximum” lifespan, how to deal with time varying covariates, and how to assess the effects of putative mediating variables when measuring those variables requires killing the animal before its lifespan can be observed. These questions will be addressed. Existing methodologic approaches will be offered and areas for new investigation identified.

SESSION 135 (SYMPOSIUM)

BIOSOCIAL STUDIES OF HEALTH AND AGING IN THE WISCONSIN LONGITUDINAL STUDY

Chair: R.M. Hauser, *Sociology, University of Wisconsin-Madison, Madison, Wisconsin*

The most important scientific development in life-course and aging research in the past decade has been the increasing overlap and integration of socio-behavioral and biomedical research facilitated by the collection of biomarkers in longitudinal social surveys. This symposium brings together several exemplars of biosocial research, drawing in common on a single, rich longitudinal set of data from the Wisconsin Longitudinal Study (WLS). The Wisconsin Longitudinal Study (WLS) is a long-term study of a random sample of 10,317 men and women who graduated from Wisconsin high schools in 1957 and who have been followed for more than half a century. The WLS provides an opportunity to study the life course, intergenerational transfers and relationships, family functioning, physical and mental health and well-being, and morbidity and mortality from late adolescence through the retirement years. WLS data also cover social background, youthful aspirations, schooling, military service, labor market experiences, family characteristics and events, social participation, psychological characteristics, and retirement. The papers in this symposium focus on several of the complex relationships among genetic makeup, social characteristics, and health, ranging from the effect on chronic disease conditions of parental age at birth, to the psychosocial stress response to a cancer diagnosis, genetic sources of impulsivity and their consequences for education and careers, to relationships between youthful social participation, social support, and health in later life.

PARENTAL AGES AT BIRTH ARE ASSOCIATED WITH MAJOR CHRONIC DISEASES AND SOMATIC SYMPTOMS OF THE OFFSPRING IN LATER ADULTHOOD

D. Kuo, *University of Wisconsin-Madison, Madison, Wisconsin*

In this paper, I used Wisconsin Longitudinal Study to examine the relationships between parental age at birth and physical symptoms and major chronic diseases of the offspring in later adulthood. In an earlier study, I found that parental ages were associated with self-reported health status, total number of diagnosed illnesses, and number of physical symptoms, using both multivariate regression analysis and structural

equation model. In the current study, the observed outcomes were specific medical conditions and systems of physical symptoms. The chronic conditions included high blood pressure, angina, stroke, high blood sugar, diabetes, allergy, asthma and cancer. Parental socioeconomic status, childhood health, family environment and one's own socioeconomic status were controlled. Multivariate logistic regression was employed in the current study. The following research questions were addressed: 1) Whether paternal age and maternal age were associated with those conditions and types of symptom of the offspring in later adulthood; 2) Whether the relationships were independent of parental socioeconomic, for example, parental education, occupation, maternal employment, and family income; and early family environment, for example, family structure, health environment in the household/family, and violence/abuse in the family; and 3) Whether socioeconomic status of the offspring explain the relationship. The multivariate logistic regression analysis showed that parental age, especially father's age, have small but robust relationships with many chronic conditions and most types of physical symptoms.

UNDERSTANDING THE ROLE OF SUPPORT IN PROMOTING HEALTHY AGING

E. Siegl¹, P. Brenner², 1. *Sociology, University of Wisconsin-Madison, Madison, Wisconsin*, 2. *University of Michigan, Ann Arbor, Michigan*

Evidence of a robust relationship between social support and health has accumulated over the past several decades. However, questions remain about how the support/health relationship varies among different health outcomes and whether benefits are universal. In fact, growing evidence points to wide variation in which aspects of health are improved by what type of support and for whom. In this study, we contribute to the understanding of this variation by comparing how structural (social integration) and functional (instrumental) support predict different indicators of health: physical functioning, number of illnesses, self-reported health and depression. Further, we examine how these relationships vary by gender. Using longitudinal panel data to control for baseline health, we create a rigorous test of when and for whom structural and functional forms of support provide direct pathways to mental and physical health.

CAN YOUNG ADULTS' SOCIAL PARTICIPATION EXPLAIN VARIATION IN OLDER ADULTS' HEALTH?

E. Siegl, *Sociology, University of Wisconsin-Madison, Madison, Wisconsin*

A growing body of evidence links health and adult social participation. What remains unclear is whether these relationships are unique to adulthood or have their roots in adolescence. Because many studies of adolescent participation end in early adulthood, little is known about how participation-health relationships develop across the life course. This study employs longitudinal panel data from the Wisconsin Longitudinal Study to assess whether adolescent social participation has lingering direct or indirect effects on health in late adulthood using three indicators of mental and physical health: depressive symptoms, body mass index and activities of daily living. Initial results indicate that relationships between health and participation are strongest in adulthood. However, adult participation is predicted by adolescent levels and types of participation. Both cross-sectional and some longitudinal indicators of participation predict lower levels of depressive symptoms and less difficulty with activities of daily living, but a higher body mass index.

CHARACTERIZING THE MAGNITUDE AND LONG-TERM TEMPORAL COURSE OF THE PSYCHOLOGICAL STRESS RESPONSE BEFORE AND AFTER A CANCER DIAGNOSIS

J.R. Schumacher, M.A. Smith, *Population Health Sciences, University of Wisconsin-Madison, Madison, Wisconsin*

Forty percent of cancer survivors report psychological distress, which is costly in terms of well-being and health care use. It is unknown whether

stress predates the illness or differs from non-cancer patients because studies are limited to patient follow-up after diagnosis. We estimate the magnitude and temporal course of the stress response pre- to post-cancer diagnosis using data from the Wisconsin Longitudinal Study. The change in stress (depression, anxiety, psychological well-being) in participants diagnosed with cancer between 1992-1993 and 2003-2004 was compared to participants without cancer. Cancer survivors were more likely to experience clinically significant worsening of depression and anxiety symptoms compared to no-cancer controls. Within five years of diagnosis, cancer survivors were more likely to experience worsening, while after five years were more likely to experience improvements in depression relative to no-cancer controls. Characterizing the stress response is a pre-requisite for identifying patients at-risk and facilitates proactive resource provision.

SESSION 140 (SYMPOSIUM)

DIARY APPROACHES FOR STUDYING THE EFFECTS OF DAILY STRESSORS ON THE HEALTH OF CAREGIVERS

Chair: J. Savla, *Center for Gerontology, Virginia Tech, Blacksburg, Virginia*

Discussant: S. Charles, *University of California, Irvine, California*

A preponderance of studies on caregiving have relied on caregivers' retrospective accounts of their situations and experiences over a relatively long period of time, covering weeks, months, and years. As a result, these accounts are likely to be confounded by co-occurring events and memory distortions and are typically limited to assessment of mean level processes and outcomes. Recently, researchers have recognized the importance of examining the more immediate impact of caregiving against the context of daily living and its cumulative effects over time for the caregiver. Using daily diary methods, the presentations in this symposium highlight the conceptual and methodological advances in structuring the passage of time using daily diary designs to arrive at descriptions and dynamic explanations of how everyday factors have immediate and long term effects on caregivers' health. Zarit and colleagues examine caregivers' appraisals of daily behavior problems of persons with dementia and implications for caregivers. Berg and colleagues examine couples' shared daily distress and how it is affected by husband's symptoms from prostate cancer. Savla and colleagues examine daily stressors associated with living with persons of mild cognitive impairment and its consequences on marital relationship and health. Finally, Almeida and Seltzer combine longitudinal and daily assessments of behavior challenges of children with autism to predict the diurnal rhythms of salivary cortisol of their caregivers as an indicator of destabilizing health. The critique and discussion of Charles focuses on the promises and challenges of daily diary studies to further our understanding of everyday health and illness.

DAILY STRESS AND WELL-BEING OF FAMILY CAREGIVERS

S.H. Zarit¹, E. Femia¹, K. Kim¹, J. Savla², 1. *Human Development & Family Studies, Penn State University, University Park, Pennsylvania*, 2. *Virginia Tech University, Blacksburg, Virginia*

Most research on family caregivers has depended on retrospective reports of stressors such as behavior problems that had occurred during the past week or past month. These reports provide little information about fluctuations that might happen from day to day or in relation to interventions designed to lower exposure to stressors. This presentation looks at findings from the Family CARES study, which examined daily stress of caregivers of persons with dementia and the variability in exposure to stressors related to use of adult day services (ADS). Caregivers' daily exposure to stressors was 66% lower after two months on days their relative attended ADS, and their reports of daily subjective stress also decreased. Decreases in stressors were associated with a decline in feelings of overload and role captivity after three months.

These results indicate the potential for using daily assessments for understanding caregivers' stress and the effects of interventions.

DAILY STRESSORS AND IMPLICATIONS OF MILD COGNITIVE IMPAIRMENT FOR CARE PARTNERS

J. Savla, K.A. Roberto, R. Blieszner, *Center for Gerontology, Virginia Tech, Blacksburg, Virginia*

The effects of mild cognitive impairment (MCI) on everyday functioning of elders and burden on their relatives are not well understood. This research assesses the daily frequency and intensity of behaviors and symptoms associated with MCI and their effects on the marriage and spouse care partners' health and well being. Thirty spouse care partners participated in a seven-day daily diary study and reported on behavior problems associated with MCI and daily stressors and strains experienced by the care partner. They also provided saliva samples on four of the study days. Within- and between-person analysis revealed variability and change in mental and physical health across the seven days. Marital relationship, daily stressors, and everyday situations predicted these changes. Findings shed light on MCI-specific interventions that address couples' needs before severe disease progression occurs that could interfere with their ability to provide home-based care and support to persons with MCI.

SHARED DAILY DISTRESS IN HUSBANDS AND WIVES DEALING WITH PROSTATE CANCER

C.A. Berg¹, M.A. Skinner¹, D.J. Wiebe², J. Butner¹, M. Freitag¹, M. Forsman¹, 1. *Psychology, University of Utah, Salt Lake City, Utah*, 2. *University of Texas Southwestern Medical Center, Dallas, Texas*

The shared daily distress experienced by couples dealing with prostate cancer was examined and factors affecting distress. Fifty-nine husbands and wives completed diaries for 14 days reporting stressful events, distress, whether the stress was due to cancer; husbands reported on symptoms. Hierarchical Linear Modeling revealed that greater distress for husbands was accompanied by greater distress of the wife ($b=.15$, $p<.01$). Husbands reported greater distress on days when they experienced greater symptoms associated with the illness ($b=.14$, $p<.01$) and their problems were more due to prostate cancer ($b=.22$, $p<.01$). Wives' distress was not associated with husbands' symptoms, but was higher when the distress was due to prostate cancer ($b=.15$, $p<.01$). Qualitative analyses of the content of the stressful events also revealed concordance. The results demonstrate the linked nature of couples' daily experience as they deal with a chronic illness.

DAILY EXPERIENCES AND DIURNAL CORTISOL IN MIDLIFE MOTHERS OF INDIVIDUALS WITH AUTISM AND CONTROLS

D. Almeida¹, M. Mailick Seltzer², J. Hong², J. Greenberg², L. Smith², R. Stawski¹, 1. *Penn State University, University Park, Pennsylvania*, 2. *University of Wisconsin, Madison, Wisconsin*

This paper will examine daily stress in the lives of midlife mothers of adolescents and adults with autism ($n=86$), in contrast to a comparison group of similar mothers whose children do not have disabilities ($n=171$) drawn from the MIDUS study. Using identical daily diary methods, mothers provided ratings of their daily time use, positive and negative mood, stressors, and positive events over an 8-day period. In addition, on days 2 - 5 of the study, mothers provided 4 saliva samples each day from which cortisol was measured (when they woke up, 30 minutes later, before lunch, before bedtime). The results show how the two groups of mothers differ with respect to the association between characteristics of daily stressors and cortisol expression. The discussion will focus on how capturing situational variability is vital to elucidating how stressors trigger cortisol regulation, in typical and atypical populations.

EMOTIONS

THE RELATIONSHIP BETWEEN DAILY STRESS AND NEGATIVE AFFECT: THE ROLE OF PRIMARY AND SECONDARY CONTROL

A. Russell, C. Bergeman, *Psychology, University of Notre Dame, Notre Dame, Indiana*

Two key types of control beliefs have been distinguished in the literature—control over one's environment, referred to as primary control, and control over one's internal and emotional self, or secondary control (Heckhausen & Schulz, 1995; Rothbaum, Weisz, & Sneider, 1982). Although both types of control may help individuals cope with adversity, it is unclear how each type of control influences emotion regulation in the face of daily life events. The present study compares the ability of primary control, measured by the Environmental Mastery scale (Ryff, 1989) and secondary control, assessed using the Perceived Control of Internal States Scale (Pallant, 2000) to predict the relationship between daily stress and daily negative affect in a sample of older adults. Preliminary multi-level modeling analyses indicate that both primary and secondary control moderate the relationship between perceived stress and negative affect using a daily process design. Subsequent analyses will investigate lagged effects of stress resistance and recovery on emotional well-being.

EMOTIONAL INTELLIGENCE AND SUBJECTIVE WELL BEING ACROSS THE ADULT LIFESPAN: COMPARATIVE ANALYSIS IN THREE AGE GROUPS

N. Galdona¹, C. Martinez-Taboada⁵, P. Fernandez-Berrocá³, K. Pillemer⁴, A. Reoyo², I. Laskibar¹, J. Yanguas¹, E. Urdaneta¹, *1. Fundación Instituto Gerontológico Matia - INGEMA, Research & Development Department, San Sebastian, Spain, 2. Masinnova.net, San Sebastian, Spain, 3. Facultad de Psicología - Universidad de Málaga - Departamento de Psicología Básica, Málaga, Spain, 4. Cornell Institute for Translational Research on Aging (CITRA), Ithaca, New York, 5. Universidad del País Vasco - Departamento de Psicología Social y Metodología de las CCC, San Sebastian, Spain*

Emotional Intelligence is an important aspect of well-being and it is an important predictor of real life outcomes (Charboneau & Nicol, 2002). When we examine the empirical evidence regarding age-related changes in Subjective Well Being (SWB), there is somewhat of a paradox (Kunzmann, Little & Smith, 2000). This study focuses on age-related differences in some facets of perceived emotional intelligence (attention, clarity and repair) as well as in subjective well-being (positive affect, negative affect and satisfaction with life). 188 people from three age groups (younger, middle aged and older adults) participated in this study. A statistically significant difference was found in emotional attention, between young people and adults group ($p=0.000$) but we did not find age differences in emotional clarity and repair. Regarding the affective dimension of SBW, there was a significant difference in positive affect, between young people and adults ($p=0.020$) as well as between young and older adults ($p=0.001$), that is, young people reported lower levels of positive affect compared to middle aged and younger participants. Some researchers have suggested an age-associated increase of positive affect accompanied by a decrease of negative affect due to acquisition of more efficient emotion regulations skills. These results partially support these findings; we found an age-associated increase of positive affect but we didn't find differences with negative affect. In addition, the age differences found in emotional attention, might suggest that an age associated increase of positive affect due to older adults might pay less attention to their emotions.

AFFECTIVE FORECASTING: AGE DIFFERENCES IN PREDICTING AFFECTIVE REACTIONS TO EVERYDAY ACTIVITIES

X. Ma, Y. Chen, O. Pethtel, *Bowling Green State University, Bowling Green, Ohio*

The current study explored age differences of affective forecasting in everyday activities. We tested age differences in the predicted intensity and duration of happiness across two types of activities (i.e., hedonic activities vs. growth-related activities). Thirty younger and 30 older adults completed the hypothetical everyday activities questionnaire. Results showed that younger adults predicted higher affective intensity than older adults did only in hedonic activities. The frequency of engaging in hedonic activities in the past year mediated the age group effects. No age-group effect, however, was revealed for the predicted duration of happiness in everyday activities.

EXPLORING HAPPINESS IN EXCEPTIONAL OLD AGE: THE MEDIATING ROLE OF POSITIVE AND NEGATIVE AFFECT

A. Bishop¹, P. Martin², M. MacDonald², L. Poon³, *1. Human Development and Family Science, Oklahoma State University, Stillwater, Oklahoma, 2. Iowa State University, Ames, Iowa, 3. University of Georgia, Athens, Georgia*

The purpose of this study was to explore the indirect influence of physical and mental health indicators on happiness in exceptional old age. Participants included $N = 239$ centenarians from the Georgia Centenarian Study. Path models were computed to assess how positive and negative affect mediate the association between perceived and functional health status, cognitive performance, fatigue, and distal life event stress on current happiness. Fatigue maintained a direct negative association with positive affect ($B = -.35, p < .01$) but had a direct positive relationship with negative affect ($B = .19, p < .05$). In addition, cognitive performance maintained a direct negative association with negative affect ($B = -.57, p < .01$), and distal life event stress had a direct positive relationship with negative affect ($B = .45, p < .01$). Furthermore, negative affect had a direct negative association on current happiness ($B = -.33, p < .01$), whereas positive affect maintained a positive direct association with happiness ($B = .18, p < .05$). Evidence of an indirect link between fatigue and happiness through positive and negative affect, as well as an indirect association between distal life event stress and negative affect was provided. Results indicate that fatigue and past life stressors erode happiness in the presence of negative affect. However, it appears only fatigue diminishes current feelings of happiness despite the presence of positive affect. The findings have implications relative to improving positive emotionality in very late life.

AGE-RELATED EFFECTS OF ONLINE EMOTION REGULATION STRATEGIES ON MOOD AND MEMORY

A.H. Coats¹, F. Blanchard-Fields², *1. Department of Psychology, Westminster College, Fulton, Missouri, 2. Georgia Institute of Technology, Atlanta, Georgia*

Past studies suggest that older adults have enhanced emotional outcomes compared to young adults. Further research is needed to determine the source of these age differences. One candidate explanation is that older adults handle their emotions differently than young adults when they become upset. Indeed, older adults report using different emotion regulation strategies (e.g., more distraction and more positive reappraisal) relative to young adults. The present study investigated the mood and memory-related effects of these strategies in young and older adults. Participants watched a sad film clip (i.e., selected scenes from 21 Grams) while being instructed to use specific emotion regulation strategies (i.e., avoiding negativity, focusing on positivity, focusing on negativity, or no instructions). Young adults who were instructed to avoid focusing on negativity showed better mood outcomes and more positive memory for the film compared to non-instructed young adults. Instructions to down-regulate emotions did not affect older adults, possibly because they used

such strategies spontaneously. Older adults' increased dispositional tendency to focus on positive stimuli in their everyday lives partially explained older adults' greater mood improvement. The results have implications for the effectiveness of particular emotion regulation strategies and for the generalizability of the positivity effect.

IS THERE AGE INVARIANCE IN THE EMOTION REGULATION QUESTIONNAIRE?

L. Emery, *Psychology, Appalachian State University, Boone, North Carolina*

The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) was designed to measure two emotional regulation processes: reappraisal and suppression. Although it has been suggested that older adults are more likely to use reappraisal and less likely to use suppression than young adults, previous research has yielded mixed results. One potential problem is that the ERQ has not been rigorously tested for measurement invariance across age groups. The current study used nested structural equation models to test for measurement invariance in the ERQ across a group of 150 younger adults and 145 older adults. An unconstrained model in which the loadings were free to vary in both age groups produced an adequate fit to the data [$\chi^2(66, N = 295) = 94.70$, IFI = .97, RMSEA = .04]. Constraining the loadings in one group to be equal to the other, however, significantly worsened the fit, $\Delta\chi^2(10) = 21.26, p = .02$. Subsequent partial invariance tests indicated that the lack of invariance was confined to the suppression scale. Specifically, allowing the loadings for item 4 ("When I am feeling positive emotions, I am careful not to express them") to vary across age groups resulted in no significant worsening of fit compared to the configural model, $\Delta\chi^2(9) = 12.23, p = .20$. Although the ERQ measures the same two constructs in both groups, the weightings of the items that make up the suppression scale differ between groups.

AGE DIFFERENCES AND THE EFFECTS OF MOOD ON FALSE RECALL

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Recent research with young adults suggests that elevated positive mood or arousal prior to encoding may influence susceptibility to false recall during the DRM False Memory paradigm (Forgas, Laham, & Vargus, 2005; Storebeck & Clore, 2005). This is an intriguing finding with important implications for understanding age differences in false recall, as both false recall and positive affect/arousal are increased in older adults during testing situations. This may suggest that some of this age-related variance in false recall can be accounted for by affective factors. In this study, we investigated age differences in recall of non-presented words as a function of induced mood. Using a procedure based on Storebeck and Clore, young and older adults ($N=182$) were assigned to a positive mood induction, a negative mood induction, or a control condition, followed by the DRM memory task. Initial data analyses revealed that the mood induction worked similarly in older and younger adults, eliminating any age differences in baseline mood. The mood induction, however, did have differential effects on DRM performance. Consistent with previous research, veridical recall was higher in younger adults, and was unaffected by the mood induction in either group. Intrusions were more common in older adults, and were unaffected by mood in the young adults. However, older adults in the positive mood condition made significantly more intrusions than older adults in the other conditions. This suggests that a positive mood may result in a more liberal response criterion for older adults.

SELF-ESTEEM IN THE CONTEXT OF DAILY LIFE

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A popular topic of research in Gerontology is the self-regulation of affect in daily life (Baltes & Carstensen, 1996; Lawton, 1996). The consensus is that the individual's context (both subjective and objective) has an influence on affective experience. The current analysis explores the role of self-esteem in the relationship between context and affect. Sixty-nine older adults participated in an Experience Sampling Study examining daily experiences. Participants (50 women & 19 men; average age 71.96) were signaled 6 times daily for 7 consecutive days (or 42 times per participant). Participants provided information regarding the objective situation (activity, location, companion) as well as their subjective state. The present analysis employed multilevel random coefficients modeling using HLM 6.06 to examine the effects among variables representing context, self-esteem, and positive or negative affect (level 1). We also estimated the extent to which level 1 variables vary as a function of sex (level 2). For Positive Affect, statistically significant coefficients were obtained for the objective context ($b = -.89; p = .013$) and self-esteem (coefficients range from $b = 1.06$ to $b = .57; p < .0001$). The coefficient for sex on level 2 was also significant ($b = -4.54; p = .015$). Comparable results were obtained for Negative Affect with statistically significant coefficients for the self-esteem variables (ranging from $b = -.24$ to $b = -.21; p < .0001$). Results for sex on level 2 were not significant. Results suggest self-esteem influences the link between daily context and affective experience.

AGE DIFFERENCES IN THE BENEFIT OF CONGRUENT FACIAL EXPRESSIONS ON EMOTION RECOGNITION ACCURACY

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Past research suggests that young adults are better at recognizing facial expressions of emotion than older adults. However, the typical emotion recognition task is devoid of contextual elements that may facilitate emotion recognition in everyday life. In the present study, young and older adults were asked to identify the emotion expressed by a target face accompanied by four other faces which were either expressing the same emotion as the target face (congruent) or a different emotion (incongruent). We investigated whether the pattern of age differences would change as a function of the congruency of the accompanying faces. For sad faces, young adults were more accurate than older adults on incongruent trials, but there were no age differences on congruent trials. Conversely, while there were no age differences in anger recognition for incongruent trials, young adults were better at recognizing angry faces on the congruent trials than older adults, $p < .05$. Within age groups, young adults were better at recognizing anger, disgust, and fear faces accompanied by congruent facial expressions as compared with incongruent faces. Older adults were better at recognizing fear facial expressions on congruent trials than incongruent trials. Overall, the results suggest that both young and older adults can benefit from additional contextual information when identifying emotions. It may be that congruent faces can serve as additional examples of the target emotion, facilitating emotion recognition (e.g., sad faces) while incongruent faces might at times highlight the distinct aspects of the target emotion (e.g., anger recognition).

YOUNG AND OLDER ADULTS' INTERACTIONS WITH STRANGERS AND FRIENDS IN AN ITERATED PRISONER'S DILEMMA GAME

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When faced with interpersonal conflict, young and older adults often recommend different coping strategies. Whereas young adults confront the second party, older adults use passivity to dampen emotional tur-

moil before otherwise acting. Emotion-focused strategies are often considered to be less effective than proactive, problem-focused strategies. However, in interpersonal conflicts, emotion-focused strategies reduce tensions and enable us to implement proactive strategies with fewer emotion-related obstacles. Recent research suggests that an emotion-focused approach to resolving interpersonal conflict is consistent with older adults' socioemotional goals. To examine age differences in behavioral reactions to conflict, young and older adults were asked to interact with a stranger or a friend in an iterated Prisoner's Dilemma game. Although the participants believed that they were interacting with a human partner, their partner was actually a computer program that reciprocated their choices or behaved selfishly. Problem-solving effectiveness was defined in terms of the amount of reward earned during the game. Consequently, cooperative behavior led to greater accumulated reward, even in the face of conflict. The results demonstrated that young and older adults both cooperated more with friends than with strangers and more with the reciprocating partner than the selfish partner. Interestingly, young and older adults were equally cooperative with a selfish friend, but older adults were more cooperative than young adults when interacting with a selfish stranger. In addition to their behavioral reactions during the game, older adults were less prone than young adults to rancor when providing their impressions of their gaming partners.

THE EFFECTS OF GRADED COGNITIVE CONTROL LOAD ON AGE-RELATED POSITIVITY EFFECTS IN GAZE

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What amount of cognitive control effort is needed for older adults to display motivated preferences toward positive and/or away from negative emotional stimuli? The present study investigated whether or not age-related positivity effects in visual fixation emerged under varying levels of cognitive control demand. Younger and older adults viewed a series of emotional (positive and negative) and neutral image pairs in conditions of both full and divided attention. Within the divided attention conditions, participants performed a secondary task that provided incremental increases in effortful distraction: auditory n-back with n-0, n-1, and n-2 lags. Younger adults demonstrated gaze preferences for both positive and negative images, while older adults demonstrated preferences for positive images in full attention. However, older adults also showed gaze preferences for positive images in the most difficult divided attention condition (n-2). These results suggest that older adults' positive gaze preferences are sometimes resilient to high levels of cognitive distraction.

EMOTIONAL REACTIVITY AND MEMORY BIASES IN OLDER AND YOUNGER ADULTS

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This study investigated age differences in emotional reactivity and regulation, as well as memory recall for images of varying affective states. A total of 69 younger and 56 older adults viewed a series of negative, neutral, and positive images on a projector screen. Affective states were measured during presentation of stimuli using the acoustic startle eyeblink response, as well as a self-rated measure of valence and arousal following the procedure. Fifteen minutes after presentation but prior to subjective ratings of the images, participants were asked to recall as many images they could remember from the series. Results revealed the typical startle valence pattern for younger adults but not for older adults, a distinction that remained after controlling for age differences in arousal level. Both age groups recalled approximately the same number of images; however older adults recalled a higher ratio of positive images, a lower ratio of negative images, and approximately the same ratio of neutral images than younger adults. Results are discussed in relation to the Socioemotional Selectivity theory for emotion regulation and emotional reactivity along with the Startle Reflex theory of modulation.

PREDICTORS OF SEXUAL INTIMACY AMONG ETHNICALLY DIVERSE OLDER ADULT SPOUSES

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Prior research has evaluated associations between sexual satisfaction and important outcomes such as relationship quality, mental health, and overall marital satisfaction among spouses. However, the influence of distinct categories of indicators (e.g., positive and negative relationship dimensions, physical state, relationship characteristics) on sexual intimacy among older adult spouses warrants further investigation. The current study investigated perceptions of sexual intimacy among 190 married spouses between the ages of 59 and 88 years, among which 79% of participants were White and 20% were African American. Some differences in relationship perceptions were noted across the ethnic groups. Hierarchical regression was employed to examine predictors of sexual intimacy ($R^2 = .55$). Results indicated several significant predictors including feelings of attachment, willingness to reveal intimacy, anger and resentment, and efforts to maintain one's relationship. Self-reported physical health and length of marriage were not significant predictors above and beyond these relationship-oriented variables.

AGE DIFFERENCES IN POLARIZATION OF POSITIVE AND NEGATIVE WORDS: THE IMPACT OF COGNITIVE AND EMOTIONAL LOAD

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Divergence exists in the literature concerning emotion regulation capacities in adulthood. Some findings suggest that emotion regulation improves with age while other findings suggest that emotion regulation becomes more difficult for older adults, especially for complex or highly arousing information. To investigate the impact of cognitive and emotional activation on young and older adults' evaluations, we asked 142 participants from 20 to 87 years of age to evaluate the valence of 120 positive and 120 negative words under six conditions that varied on two dimensions: cognitive load (load vs. no load) and emotional activation (neutral, positive, negative). A score of intensity was derived from the original rating scale and was used as an indicator for polarization of positive and negative words. There are two main findings: First, under cognitive load negative words are judged less intense than with no cognitive load. Thus, the cognitive load manipulation interferes with the experience of negative affect. This was the case for all age groups. Second, a multilevel model with cross random effects yielded a significant Age x Valence x Emotional Activation interaction, indicating that after a negative emotional priming, positive words were rated as more intense than negative words; and this effect was stronger with increasing age. Results are interpreted as suggesting that older adults are motivated to avoid negative or high arousing information.

AGE DIFFERENCES IN NEGATIVE EMOTIONS: FEWER RELATED TO BLOCKED GOALS BUT MORE RELATED TO LOSS

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Studies of emotional well-being and aging have revealed that negative affect decreases with age. We examined age differences in negative emotional experiences in a group of adults ($N=239$) spanning from 21 to 87 years-old who live with functional disabilities. In this sample, levels of perceived personal constraints are higher among older adults than younger adults ($r = .19$), and the physical effects related to the disability are more pronounced with age. Thus, we tested whether the same age-related decreases in negative emotional experiences would be observed. Consistent with studies of non-disabled adults negative affect decreased, and depressive symptoms were unrelated to older age. When controlling for different types of emotional experiences, however, a different picture emerged: in an analyses including both general nega-

tive affect (such as frustration and anger) and depressive symptoms, the association between age and general negative affect became even stronger, but the association between depressive symptoms now revealed a strong, positive relationship with age. Theorists have long recognized the functional utility of different types of emotional experiences. For example, anger and frustration are associated with blocked goals and problem-solving actions. Depressive symptoms, in contrast, are associated with irrevocable losses and are associated with more passive styles of coping. The findings from this study suggest that with advanced age, people living with severe functional disabilities report more frequent experiences of negative emotions related to loss and less frequent experiences related to blocked goals.

AGE DIFFERENCES IN EMPATHY: ROLE OF INHIBITION IN SELF-OTHER DIFFERENTIATION

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Empathy has been widely studied in childhood and young adulthood, but little is known on how empathy develops from young to late adulthood. Based on recent theories differentiating an automatic component of empathy (resonate with an other's emotional state) and a controlled and effortful one (understand an other's emotional state, differentiate one's own state from that of an other), we predicted that the automatic component would be well preserved with aging, while the controlled component would show aging-related declines. Using a pain judgment task, 116 adults from 20 to 80 years of age evaluated painful and neutral stimuli either in a self (automatic) or a distant-other (controlled) perspective. Individuals also were given measures of inhibition, self-evaluated empathy and fluid intelligence. Data were analyzed using mixed-effects models with subjects and items as crossed random effects on response time as dependent variable. A significant age \times perspective \times inhibition interaction revealed that young adults with poor inhibition capacities have high cost of shifting from self to other perspective, but that cost is smaller for good inhibitors. Older adults with good inhibition capacities perform equal to younger with poor inhibitors, but older poor inhibitors fail to distinguish self and other perspective. Additional analyses with fluid intelligence and self-evaluated empathy further support that self-other differentiation becomes more difficult as people age.

AGE DIFFERENCES IN EMOTION COMPLEXITY OF AUTOBIOGRAPHICAL MEMORY

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Socioemotional Selectivity Theory (SST) suggests that constraints on time left in life increase the saliency of social goals over the pursuit of knowledge. This shift towards achieving emotional satisfaction and meaning directly influences emotional experience, such that emotional states become increasingly mixed. These age-differences have been demonstrated in studies of daily emotional experience, as well as when individuals are prompted to think about meaningful endings. The current study sought to examine whether similar age differences would emerge in the emotional content of autobiographical memories. One hundred and three younger adults ($M = 20.5$, $SD = 2.02$) and 107 older adults ($M = 75.6$, $SD = 6.3$) were instructed to recall an emotional memory from high school. The emotional content of the memory was coded for positivity, negativity, and mixed emotional content (presence of both positive and negative emotion). Multinomial logistic regression analysis revealed that age group is a significant predictor of the emotional classification of the autobiographical memories ($p < .01$). Contrary to previous findings, the odds of older adults recalling a mixed memory were approximately 70% lower than the odds of recalling a positive memory, compared to younger adults ($OR = .284$, $p < .01$). The SST model was only marginally supported as the odds of older adults recalling a negative memory were less than half the odds of recalling a positive memory, compared to younger adults ($OR = .57$, $p = .08$). Possible explanations for this unexpected finding will be discussed.

"NOBODY LIKES TO ADMIT WHAT'S GOING ON":

AVOIDANCE BEHAVIORS OF FAMILIES COPING WITH MCI
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Managing stress using avoidance coping strategies allows family members to manage their emotional responses as well as cope with changes in their relative's memory, behavior, and sociability that manifest with mild cognitive impairment (MCI). The purpose of this study is to examine the use of avoidance coping behaviors by identifying conditions preceding an avoidance response, strategies used to cope, and the differences between individuals who use and do not use such strategies. This qualitative investigation included a sample of 99 families in which multiple family care partners were interviewed over a three-year period. Data analysis used Strauss and Corbin's (1990) method of constant comparison, guided by Lazarus and Folkman's (1984) conceptualization of avoidance coping behaviors. Thirty-eight care partners from 35 families reported behaviors we interpreted as avoidance-type coping responses to MCI-related stressors. Results show that avoidance behavior use was planned, unplanned, or imposed. The majority of respondents used planned behaviors to avoid conflict, deny a problem, place blame, or leave outcomes to fate. Unplanned behaviors occurred when primary care partners took advantage of opportunities to avoid conflicts or confrontations. Imposed behaviors typically occurred among adult children in response to external pressures to ignore or deny problems. Reasons cited by adult children for avoiding problems included parents being uncommunicative, unwilling to provide necessary information or insight, or insistent that they do not interfere. Study findings contribute to identification of emotional risk factors and understanding of coping strategies for family care providers.

SOCIAL AND EMOTIONAL REGULATION: AGE DIFFERENCES IN NEGATIVE AFFECT AMONG ADULTS WITH A SPINAL CORD INJURY

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Negative affect generally decreases in older age (e.g., Charles, Reynolds, & Gatz, 2001), but it is unclear whether people with a spinal cord injury (SCI) would report less negative affect because they may be dependent on their social networks for instrumental support, which may strain social and emotional experiences. The present study examined the social and emotional experiences of adults with SCI between the ages of 21 and 87 years ($N = 239$). Consistent with previous research, older age was associated with less global negative affect ($r(237) = -.14$, $p < .05$) and this effect was mediated by fewer social partners involved in negative instrumental exchanges. Interestingly, older adults do not report a lower frequency of negative exchanges than younger adults, suggesting the selection of social partners may play a role in emotion regulation. Participants classified their social partners into three different levels of emotional closeness (emotionally closest (EC), very close (VC), and less close (LS) social partners) and the effect was primarily driven by older adults reporting fewer negative instrumental exchanges with their EC and LS social partners. Participants who classified more family members as VC also reported greater negative affect ($r(213) = .14$, $p < .05$). Altogether, the findings suggest that older adults may be adept at avoiding negative instrumental exchanges with certain social partners to regulate their emotions, but negative interactions with kin ties may be unavoidable and contribute to greater negative affect. Future research should examine how older adults optimize social interactions to regulate their emotions.

TRAINING EMOTION RECOGNITION IN OLDER ADULTS

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Research has shown that, in comparison to younger adults, older adults do not spend as much time looking at the eye region when view-

ing facial expressions of anger, fear, and sadness. This neglect of eye region information is one possible reason for why older individuals show deficits in recognizing these emotions. In the current study, 55 older adults ($M = 72.20$ years of age, $SD = 8.67$) were trained to direct their attention toward the eye ($N = 31$) or the mouth region ($N = 24$) of faces displaying angry, fearful, and sad expressions. All participants experienced two types of training. In the first training, participants were instructed to follow a dot with their eyes as it traveled around the eye or mouth region of the face. In the second training method, participants were instructed to look at either the eye region or the mouth region of the face in order to help them identify the expressed emotion. In both, feedback as to the intended expression was presented after each face. A non-specific effect of training was found such that directing attention toward either the eye or the mouth region resulted in significant improvements in the recognition of angry, fearful, and sad expressions. For anger and sadness, both types of training worked equally well at improving emotion recognition; however, for fear the training that used the dot as a visual guide was more effective as compared to instructing participants to look at either the eye or mouth regions.

SESSION 150 (PAPER)

GROWING OLDER TOGETHER: AGING AND MARRIAGE

CROSSOVER OF HEALTH SYMPTOMS IN OLDER MARRIED COUPLES MANAGING BOTH DIABETES AND ARTHRITIS

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Studies examining the association of health problems with marital relationships have indicated that spousal health predicts partner outcomes (see Booth & Johnson, 1994; Yorgason et al., 2006; Bigatti & Cronan, 2002). Few studies have examined how husband and wife health covary on a daily basis. When health of one spouse predicts health of the other, little is known about the mechanisms of this transfer. This study examined how one partner's health symptoms were associated with their spouses' diabetes and arthritis symptoms, and how daily relationship satisfaction might mediate health-to-health crossover effects. Data were collected from 28 later-life couples where one spouse had been diagnosed with both diabetes and osteoarthritis (15 ill female partners, 13 ill male partners). Couples completed 14 days of daily diary surveys comprised of marital and health measures. Multilevel model results indicated that husbands with diabetes and arthritis reported more arthritis symptoms, activity limitations, and general health symptoms, when their wives reported higher average symptoms across days. Husband relationship satisfaction did not mediate these relations. Wives diabetes and arthritis health symptoms did not covary as frequently with their husband's symptoms; only their reports of hypoglycemic episodes were related to husbands' average health symptoms. However, these wives reported that their arthritis symptoms, activity limitations, hypoglycemic episodes, and health symptoms in general, were all predicted by their own daily satisfaction with their marriage. In the current sample, partner health symptoms more often have crossover effects for husbands, and that relationship satisfaction is a more important predictor for wives' health.

MARITAL QUALITY AND MORTALITY AMONG OLDER ADULTS

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A number of studies have documented that married adults have lower mortality rates than do unmarried adults (e.g., Johnson, Backlund, Sorlie, & Loveless, 2000; Lillard & Waite, 1995; Waite & Gallagher, 2000). However, studies have largely treated married adults as a homogenous group; few have examined potential variations in mortality rates among

those who are married according to marital quality. Unhappy marriages have been linked to poorer health outcomes across a variety of domains (e.g., Ren, 1997; Umberson et al., 2006; Wickrama et al., 2001), suggesting mortality may also be higher for those in lower-quality marriages. Using a sample of 7,565 married adults aged 50 and over, we examine the relationship between baseline marital quality and mortality outcomes over a six-year period using discrete time event history models with data from the 1992, 1994, 1996, and 1998 waves of the Health and Retirement Study (HRS). Marital quality is measured by two questions asking respondents how happy they are with their marriage overall and how much they enjoy the time they spend with their spouse. Results show that, net of controls for sociodemographic characteristics, marital happiness and enjoyment of time spent with spouse are both related to lower odds of mortality, although enjoyment of time with spouse is a stronger predictor of mortality than marital happiness.

MULTIPLE TRAJECTORIES OF MARITAL HAPPINESS IN MID- AND LATER-LIFE

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Past research has examined the course of marital happiness over the life course, with inconsistent results either suggesting that marital happiness declines throughout mid- and later-life, or that it dips in mid-life but then increases in later-life. Studies have also indicated that declines in health, and especially spousal health, are related to lower marital happiness. The current study examined longitudinal trends of marital happiness in 736 mid- to later- life adults using data from the Marital Instability over the Life Course study. Longitudinal mixture modeling was used to assess the growth curve trajectories adults between the ages of 40 and 76, between 1988 and 2000. A two-class model fit the data the best, with one trajectory having a higher intercept ($B=29.7$) and a linear positive slope ($B=.07$, $p < .05$) across time; (19.5% of the sample fell into this group). The other group had a lower intercept ($B=23.5$) and a linear negative slope ($B=-.12$, $p < .05$) across time; (80.5% of the sample was in this group). Moreover, health status at the first time point was predictive of class membership ($B=.26$, $p < .05$), with better health being related to membership in the higher marital happiness group. Random coefficients of intercepts and slopes for both trajectories indicated a heterogeneity within each trajectory, suggesting a range of marital experiences in mid- and later- life. The effect of health suggests a potential for higher marital happiness for those who are in good health during mid-life.

VISION IMPAIRMENT AND DEPRESSED AFFECT IN OLDER ADULTS: THE MODERATING ROLE OF MARITAL QUALITY

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Data from 707 older adults (mean age=67.9) who participated in the National Social Life, Health, and Aging Project (NSHAP) were used to examine the extent to which a good marriage buffers the known adverse role of poor vision in depressed affect. Vision was assessed in NSHAP both subjectively (via a single self-reported item) and objectively (via a vision test). Five dimensions of marital quality were measured including spouse's supportive behavior; spouse's unsupportive behavior; marital happiness; the extent of physical pleasure derived from the relationship; and the level of emotional satisfaction with the relationship. Depressed affect was measured using the shortened Center for Epidemiological Studies-Depression scale. A moderated regression analysis indicated that, after controlling for sociodemographic factors and the objective measure of vision, greater self-reported vision impairment, more unsupportive spousal behavior, less marital happiness, and a less physically pleasurable marriage were independently related to greater depressed affect ($\Delta R-sq=.131$). More interestingly, a significant interaction of self-reported vision loss x physically pleasurable marriage emerged ($\Delta R-sq=.021$). A test of simple slopes showed that for respon-

dents whose marriages were less physically pleasurable, greater self-reported vision impairment predicted higher depressed affect; in contrast, for those whose marriages were more physically pleasurable, there was no link between self-reported vision impairment and depressed affect. In the second model, the objective measure of vision impairment was used as the criterion. This objective measure was unrelated to depressed affect; in addition, no interactions between objective vision scores x marital quality indicators were statistically significant. These results show that, although objective assessments of vision are unrelated to depressed affect among older adults, poor self-reported vision is a significant contributor to depressed affect among older adults, and that this link is significantly attenuated by a marriage that is marked by greater physical pleasure.

THE ROLE OF MARITAL SATISFACTION IN PREDICTING POSITIVE MENTAL HEALTH AMONG CAREGIVING COUPLES WITH A SON OR A DAUGHTER WITH SCHIZOPHRENIA

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The purpose of this study was to examine differences in the well-being between aging mothers and fathers caring for an adult child with schizophrenia and the impact of marital satisfaction on parental well-being. The sample included 102 aging father/mother dyads. The fathers and mothers were on average, aged 71 and 69 years, respectively. There were no significant differences between mothers vs. fathers on measures of depression (10.26 vs. 9.79), psychological well-being (71.26 vs. 69.91), subjective burden (33.01 vs. 33.10) or marital satisfaction (77.36 vs. 81.17). For both mothers and fathers, higher levels of marital satisfaction was associated with lower levels of subjective burden and higher levels of psychological wellbeing. The relationship of marital satisfaction to lower levels of depression was stronger for fathers ($\beta = -.502$) than for mothers ($\beta = -.249$). For fathers, but not mothers, the amount of assistance they provided to their adult child with schizophrenia was associated with higher levels of distress, even though they provided much less care than their wives. Our findings underscore the vulnerability of aging fathers to the stress of caring for an adult child with schizophrenia, and challenge the belief that it is only mothers who experience the negative consequences of caregiving. The study points to the importance of the marital relationship as a resource to aging parental caregivers and the need for services that support this relationship.

SESSION 155 (PAPER)

IMPACT OF QOL ON HEALTHY LIVING

SOCIAL ISOLATION, ORAL HEALTH, AND HEALTH RELATED QUALITY OF LIFE IN A MULTI-ETHNIC SAMPLE OF OLDER RURAL ADULTS

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Social isolation among older adults has been related to poor health (e.g., greater risk for specific conditions, such as cardiovascular disease and diabetes) and lesser health related quality of life. This population-based survey of oral health among adults 60+ years included a random sample of 635 stratified by gender and ethnicity (African American, American Indian, white) recruited from rural North Carolina. Respondents completed in-home interviews which included items needed to construct measures of social engagement and social interaction, oral health, and health related quality of life (SF-12). Measures of social iso-

lation included no social engagement (no participation in church, social club, senior center, or employment) and limited social interaction (four or fewer face-to-face interactions with children, other relatives, or friends per month). No social engagement was associated with being white, male, unmarried, below poverty, and lower education, while limited social interaction was associated with not being married. Having no social engagement was associated with having fewer teeth ($p = .0080$), a lower score on the SF-12 physical health subscale ($p < .0001$), and lower self-rated health ($p = .05436$). Having limited social interaction had a curvilinear association with number of teeth ($p = .0216$), not having oral pain ($p = .0181$), and lower self-rated health ($p = .0125$). As anticipated by the disablement process model, in this multi-ethnic sample of rural older adults, social isolation is associated with oral health problems and low health related quality of life. Further research is needed to delineate the social mechanisms connecting social isolation with disability and diminished quality of life. (NIH Grant R01-DE17092)

QUALITY OF LIFE AND ADULT DAY HEALTH CENTER PARTICIPATION

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Offering social, nursing, and rehabilitation assistance, Adult Day Health Centers (ADHC) are an integral part of community services for disabled older adults. However, little is known about whether participants feel they benefit from ADHC attendance. Utilizing 3 domains (Role-Physical, Social Functioning, and Role-Emotional) of the Medical Outcomes Survey Form SF-36, this 12-month case-controlled prospective study compared perceived quality of life of ADHC participants with community-dwelling older adults from social service agencies and subsidized senior housing. The ethnically diverse ADHC ($n = 57$) and comparison group ($n = 67$) subjects did not differ significantly at baseline in mean age (77 vs. 79 years), ethnicity, medical conditions, depression, cognitive status, immigration history, education, income, and marital status. Significantly more comparison group subjects lived alone than ADHC subjects ($p = .002$). One year after enrollment, adjusted Role Physical scores for ADHC participants improved (17.6 vs. 28.0), but declined for the comparison group (31.6 vs. 19.5, time by group interaction $p = .006$). Role Emotional scores improved for ADHC participants (52.0 vs. 58.2), but declined for the comparison group (55.2 vs. 43.1, time by group interaction $p = .048$). No significant time by group interaction occurred for Social Functioning. Enhanced quality of life is the first goal of Healthy People 2011 and this study provides evidence that ADHC programs may help chronically disabled older adults achieve this important public health goal. After attending this presentation, participants will be able to discuss the association of ADHC attendance and participant outcomes as well as the importance of ADHC in the continuum of community care.

QUALITY OF LIFE OUTCOMES IN THE NURSING HOME: INDIVIDUALIZED POSITIVE PSYCHOSOCIAL INTERVENTION

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This study examined the effectiveness of an Individualized Positive Psychosocial Intervention (IPPI) designed to enhance the quality of life for persons with dementia residing in nursing homes. The IPPI included communication training for certified nursing assistants (CNAs) who

delivered a 1-1 individualized recreational activity to residents. We hypothesized that persons receiving the IPPI would demonstrate more positive affect and more positive verbal and nonverbal behaviors compared to those in attentional control (AC) and usual care (UC) groups. Residents were randomly assigned to receive one of the following conditions: IPPI (n=44), AC (n=43), a standardized 1-1 interaction (e.g. reading a magazine aloud) between the CNA and resident, or UC (n=93). The assigned interventions were conducted for 10 minutes, three times per week, for three weeks. Real time direct observation techniques were utilized by employing a hand held device “the Observer” to measure affect and verbal and nonverbal behaviors. Multivariate analyses of covariance (MANCOVA) were conducted to determine the effect of the study conditions (IPPI, AC, and UC) on affect, verbal behavior, and nonverbal behavior. Significant differences were found on affect, Wilks’ Lambda = .87, $F(10, 340) = 18.52$, $p < .001$; verbal behaviors Wilks’ Lambda = .22, $F(10, 340) = 37.96$, $p < .001$, and nonverbal behaviors Wilks’ Lambda = .27, $F(10, 340) = 22.17$, $p < .001$. The effect sizes ranged from .74 to 1.06. These findings suggest that individualized recreational activities administered by CNAs increase resident quality of life evidenced by increased pleasure, alertness, very positive verbal statements, engagement, and positive touch.

HEALTH AND QUALITY OF LIFE: INVESTIGATING YEARS TO BE LIVED HEALTHY AND SATISFIED WITH LIFE

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Recent research has begun to investigate happy life expectancy—the number of years of remaining life individuals can expect to live happy (vs. unhappy)—and life course patterns therein. Even more recent research has begun to simultaneously consider years of remaining life to be spent in combined health and happiness states. All of this research to date, however, has used cross-sectional mortality and survey data and cannot, therefore, actually capture individual-level patterns in health and happiness across age. In this research, we broaden the current literature in two ways. First, we use panel data from the four in-person waves of the Duke EPESE and investigate individual-level patterns in health and life satisfaction across age. Second, while previous research on health and happiness has been limited to measuring health via self-rated health, we are able to measure health states using a variety of health measures, including ADL and IADL limitations in addition to self-rated health. Preliminary findings indicate that a substantial proportion of respondents (roughly 40%) experience transitions between being satisfied vs. unsatisfied with life. In addition, the majority of the sample experiences transitions into and out of healthy and unhealthy states, regardless of how health states are defined. These findings suggest that multistate life table results that decompose the latter life course into years lived in each health/happiness state provide a realistic depiction of later life. These results and their implications are discussed.

HEALTH-RELATED QUALITY OF LIFE AS A PREDICTOR OF MORTALITY: A DOMAIN-SPECIFIC ANALYSIS

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A number of studies confirm that overall measures of health-related quality of life (HRQL), such as the Health Utilities Index Mark 3 (HUI3), are predictive of mortality (Kaplan et al 2007). This study examined which specific domains of HUI3 (vision, hearing, speech, ambulation, dexterity, emotion, cognition, and pain and discomfort) were associated with mortality risk. Data derived from the Longitudinal Canadian National Population Health Survey, consisting of 12,375 female and male adults. HUI3 was measured at baseline in 1994/1995. Cox proportional hazards regression models were applied to estimate mortality

risks over 12 years. Of the eight domains examined, ambulation (Hazard Ratio [HR] = 0.16; 95% Confidence Interval [CI] = 0.06 – 0.39) and hearing (HR = 0.19; 95% CI = 0.06 – 0.60) were significantly associated with an elevated risk of mortality after controlling for an array of potential confounders. This research indicates that ambulation and hearing at baseline are predictive of subsequent mortality. The finding regarding the predictive ability of ambulation is consistent with previous studies; however, the result concerning hearing is novel. It is possible that hearing loss is a marker of neurological decline. Furthermore, hearing loss may contribute to social isolation and subsequent declines in physical and psychological health. This research emphasizes the need to examine further the underlying mechanisms of the association between ambulation or hearing and mortality risks.

SESSION 160 (PAPER)

LATE LIFE DEPRESSION

SUBTHRESHOLD DEPRESSION AMONG RESIDENTS OF CONGREGATE HOUSING: CHARACTERISTICS AND SYMPTOMS

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Objectives: This study examined symptoms of subthreshold depressed older adults compared with their non-depressed peers, and tests a conceptual model of subthreshold depression. Hypotheses included that subthreshold depression would be characterized and distinguished by low energy, social withdrawal and depletion, rather than sadness, and that subthreshold depressed elders would be distinguished by poorer health and functioning, loneliness and grieving a recent loss. **Method:** A self-administered survey was followed by a diagnostic interview by telephone to N = 166 white and African American residents of independent and assisted living apartments from six retirement communities, average age 82.9 years. The MINI diagnostic interview determined depression status. The 30-item Geriatric Depression Scale was used to measure symptoms. **Results:** Forty-six individuals (27.7%) were identified as subthreshold depressed, seven as suffering from major depression, and 113 as non-depressed. Subthreshold depression was characterized by low energy, difficulty with initiative, worries about the future, lack of positive affect, sadness and irritability. Negative affect symptoms such as sadness and irritability best discriminated the subthreshold group from the non-depressed. Risk factors for subthreshold depression in this sample included lower socio-economic status, grieving, and social loneliness. **Conclusion:** Subthreshold depression in this group of residents of congregate housing was similar to the depletion experienced by many non-depressed elders, but further characterized by negative affect and lack of hope for the future. Social factors, such as socioeconomic status, loneliness and personal losses, constituted greater risks for subthreshold depression than did health and functioning.

CHARACTERIZING THE RELATION BETWEEN DEPRESSIVE SYMPTOMS AND PARKINSON’S DISEASE IN A SAMPLE OF SWEDISH TWINS

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Depression commonly co-occurs with Parkinson’s disease (PD). Psychosocial stressors and biochemical changes associated with PD have both been implicated in the etiology of depression in PD. The purpose of the current study was to examine whether genetic or environmental influences contribute to the increased risk for depression among individuals with PD in a population of twins. Among individuals with PD, 24% endorsed a moderate-severe level of depressive symptoms, and 40% endorsed at least a mild level of depressive symptoms. Case-con-

trol results indicated that PD is a significant risk factor for both mild (OR = 1.86, CI = 1.11-3.12) and moderate-severe (OR = 3.15, CI = 1.74-5.67) depressive symptoms, adjusting for age, sex, and prior history of major depression. Odds ratios were not significantly attenuated in the co-twin control analysis compared to the case control analysis for either mild or moderate-severe depressive symptoms, suggesting that genetic influences are unlikely to account for the increased risk of depression among PD patients. Further support for environmental rather than genetic influences on the PD-depression relation was revealed by examining the risk of depression among co-twins of PD patients versus co-twins of non-PD controls. Controlling for age, sex, and prior history of depression, PD in the co-twin was not a risk factor for mild or moderate-severe depressive symptoms in the non-PD twin. These findings indicate that environmental influences likely play an important role in the etiology of depression in individuals with Parkinson's disease. Alternatively, brain changes associated with PD may heighten biological vulnerability to depression.

CHILDHOOD ADVERSITY, RECENT LIFE EVENTS AND DEPRESSION IN LATE LIFE

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The study investigates whether persons who have experienced childhood adversity are more likely to develop depressive symptoms when faced with recent events. Data were used from a population-based sample, aged 55 to 85 years (n=1,887), which were not depressed at baseline. Childhood adversities and recent stressful life events were retrospectively assessed. Depressive symptoms were measured with the CES-D. 14.4% of our sample experienced adverse events during childhood (<18 yrs) and 35.4% experienced recent events. Persons who experienced adverse events during childhood reported more recent events than the persons who did not report childhood adversity. Associations of depressive symptoms were found with both, childhood adversity (OR 1.80, 95%CI 1.21-2.69) and recent life events (OR 1.42, 95%CI 1.01-2.00). The effect of recent events on depressive symptoms was not modified by childhood adversity. Therefore, no evidence was found for the assumption that older persons were more vulnerable for depression in reaction to recent life-events when they were exposed to childhood adversity.

CEREBROVASCULAR RISK FACTORS, COGNITIVE FUNCTIONING AND DEPRESSIVE SYMPTOMS IN WOMEN OVER 80

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Women over age 85 are the fastest growing population segment, but are underrepresented in vascular depression research. This study examined the relationship between cerebrovascular burden and depressive symptoms over six years. The baseline sample included 1,355 stroke-free women 80 years and over in the Health and Retirement Survey (1998-2004). Cerebrovascular risk factors (CVRFs) included hypertension, heart disease, diabetes and lifetime smoking. Respondents were grouped into low (0 or 1 CVRF) and high (2+ CVRFs) cerebrovascular burden and low and high cognitive functioning based on the Telephone Interview for Cognitive Status (TICS). The dependent variable, depression symptoms, was measured using the 8-item Center for Epidemiological Studies Depression Scale. Cross-sectional analysis revealed a significant interaction between baseline CVRFs and cognitive test performance predicting depression symptoms at baseline ($F=8.198, p=.004$) but not at follow-up. The main effect for baseline CVRFs significantly predicted depression symptoms at all four waves ($p\leq.001$). Longitudinal analysis revealed that CVRFs ($F=9.795, p=.002$) predicted depression symptoms. The interaction between CVRFs and Time showed a trend toward significance ($F=2.434, p=0.065$). Results support the vas-

cular depression hypothesis in older-old women. The interaction between CVRFs and cognitive functioning predicted depression symptoms cross-sectionally and CVRFs predicted depression symptoms across 6 years of follow-up. The relationship between CVRFs and depression is likely underestimated in the longitudinal analysis. While it is normative to lose older-old participants due to death and incapacity, the attrited group, reported greater baseline depression symptoms, scored significantly lower on cognitive testing and had significantly greater cerebrovascular burden than did the non-attrition group.

SESSION 165 (POSTER)

MENTAL HEALTH

MENTAL HEALTH AND SOCIAL ISOLATION IN ETHNICALLY DIVERSE OLDER ADULTS

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Social support has long been considered a key component of optimal physical and mental health (Cohen & Wills, 1985; House et al., 1988), and lack of such support is linked to increased rates of depressive disorders especially among older adults (Arean & Reynolds, 2005; Palinkas et al., 1990). We explore the association between social isolation and the need for and use of mental health services among older adults in San Diego, California. Semi-structured interviews were conducted with 23 providers/administrators of health and social services, 19 caregivers/family members and patient advocates, and 16 service clients and other older adults ages 55+. These were followed by 15 focus groups composed of the three aforementioned stakeholder groups, separately. Bilingual interviewers and/or interpreter services were utilized to accommodate Spanish- and Arabic-speaking participants. Results show that older adults experience loneliness and depression due to loss of or geographic separation from loved ones, lack of affordable housing, meaningful employment opportunities, and limited income. Socially isolated older adults are more likely to have mental health problems that are undetected by others and thus go without treatment. Lack of transportation and information on available services further restricts access. Even when services are available, the unwillingness to use them due to stigma contributes to further isolation. Language and other cultural factors further compound the isolation and depression experienced by immigrant older adults. Results suggest that social isolation is both a cause and consequence of mental health problems in older adults, and language and culture should not be ignored when providing outreach.

CREATIVELY AGING: EXPLORING MEANING IN LIFE IN OLDER ADULTS

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An interdisciplinary team consisting of counselors, dietitians, nurses and physical therapists investigated physical, emotional, mental and spiritual wellness in a sample of 147 adults between the ages of 63 and 98 living independently in Peoria County, Illinois. The sample was representative of older adults in the state with regard to gender, race, and economic status. Researchers gathered data through a battery of assessments including the Geriatric Depression Scale, Meaning in Life Scale and the Life Satisfaction Questionnaire. Significant relationships were found between meaning in life and depression, health satisfaction, life in general, volunteerism and health in general. These relationships provide implications for creatively engaging and counseling older adults within an integrated approach to development. Recommendations are made to enhance and promote a meaningful life for older adults.

MENTAL HEALTH LITERACY AMONG OLDER AFRICAN AMERICANS RESIDING IN A SOUTHERN STATE

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Older adults often have limited mental health literacy which may lead to lower use of preventive services, worse self-management skills, and higher hospitalization rates. We conducted qualitative interviews to assess mental health literacy with 22 African American seniors residing in central Kentucky. Semi-structured interviews covered four domains: familiarity with mental disorders, risk factors and causes of mental disorders, self-help and professional interventions, and mental health information-seeking. Content analysis was conducted to organize and summarize the data. Study findings indicated the most recognized mental disorders affecting this sample of older African Americans were dementia (73%) and depression (32%). Additionally, participants in the study frequently reported physical and psychosocial challenges as risk factors for mental disorders. With respect to self-help and professional interventions, these participants highly endorsed the use of spiritual interventions, social support, physicians, and community mental health services. Finally, over three-fourths of participants were knowledgeable about mental health information-seeking. Older African Americans would benefit from health care professionals including more mental health content in comprehensive assessments. Specifically, health care professionals can assist older African Americans in linking with culturally appropriate interventions to offset mental health problems.

AGE DIFFERENCES IN COMORBID MENTAL AND PHYSICAL ILLNESS: FINDINGS FROM THE NATIONAL SURVEY OF AMERICAN LIFE

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Comorbid chronic physical illness is often cited as one barrier to the diagnosis and treatment of mental disorders among older adults. However, there is little epidemiological evidence that older adults with mental illness have comorbid physical illnesses at a greater rate than their younger counterparts. This study uses data from the National Survey of American Life to examine the prevalence of mental and physical disorders across different age cohorts. The analytic sample is adults aged 18 and older with at least one mental or physical illness (n=3,820). Mental disorders include mood and anxiety disorders. Physical illness includes a range of common chronic problems such as asthma, high blood pressure, and diabetes. Using multinomial logistic regression we examine the effect of age on the likelihood of having a mental disorder only, a physical disorder only, or both. Two percent of adults age 55 and older have a mental disorder only, 80% have a physical disorder only, and 18% have comorbid mental and physical disorders. Controlling for other factors, those aged 55 and over are more likely than those age 18 to 29 to have comorbid mental and physical disorders compared to having a mental disorder only; however, older adults are more likely than all other age groups to have a physical disorder only. These findings confirm the importance of understanding chronic physical illness and the ways in which it may interact with mental illness among older adults. Potential implications for service use and treatment will be discussed.

THE EFFECTS OF EDUCATIONAL ATTAINMENT AND GENDER ON DEPRESSION IN LATER LIFE

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The purpose of this study is to investigate the effects of educational attainment on depression during later life. Furthermore, an objective of this study is to clarify whether the effect of education on depression is different for men and women. Historically, females had less access to educational opportunities during their early years than males. The tra-

ditional expectation for women, as they reached adulthood, was to be married, create a family, and fulfill the role of the caregiver for the family. The social expectation of men to be the financial supporter for the family may be a more significant determinant of psychological health during old age. Therefore, in the current cohort of older persons, the role of obtaining an education may render different meanings on psychological health for men and women. Utilizing a nationally representative data set of older persons, the Health and Retirement Study (HRS), the statistical analyses entails estimating two logistic regression models that incorporate interaction variables to test the difference between men and women in education, income, and net worth coefficients. The sample for this study consists of participants from the 1998 wave of the HRS (N=9,626). The findings indicate that the level of education appears to have implications for mental health in older women, while income may have greater importance for men's psychological health during later life.

RACIAL AND ETHNIC DIFFERENCES IN THE ASSOCIATION BETWEEN SELF-RATED MENTAL HEALTH AND MENTAL DISORDERS AMONG OLDER AMERICANS

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This study focuses on self-rated mental health (SRMH), a single item question worded as "How would you rate your mental health?" The purpose of this study was to examine the association between self-rated mental health and clinical diagnoses of mental disorders (mood and anxiety disorders) in racially/ethnically diverse older adults. Four racial/ethnic elderly groups were drawn from the Collaborative Psychiatric Epidemiology Surveys (CPES) and included 429 Whites, 586 Blacks, 260 Hispanics, and 165 Asians who provided information on self-rated mental health. Kappa statistics and logistic regression analyses were conducted. Results showed that self-rated mental health was not identical to clinical diagnoses of mental disorders. Apparent racial and ethnic differences existed in the association between SRMH and mental disorders: older Whites were most likely to be screened while older Asians were least likely to be screened for both mood and anxiety disorders. The findings provide useful information on developing race/ethnicity-specific strategies to screen mental disorders in diverse elderly populations. Future studies are needed to investigate possible reasons that influence responses to self-rated mental health across diverse populations.

IS LIVING ALONE THE LONE LIVING ARRANGEMENT THAT POSES RISK FOR LONELINESS IN LATER LIFE?

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Purpose: Previous studies have identified living alone as a risk factor for loneliness in later life without examining the extent to which other types of living arrangements pose a similar risk. The purpose of this study was to explore linkages between multiple types of living arrangements and loneliness in later life. Design and Methods: We analyzed data from the National Social Life Health and Aging Project. We estimated multivariate models to examine associations between a variety of types of living arrangements (living only with a spouse, living with a spouse and children, living only with a non-marital partner, living only with adult children, living with others, living alone) and loneliness among adults ages 60 years and older. Results: Older adults living with other people besides an intimate partner (i.e., children or other relatives and friends) reported levels of loneliness comparable to adults who lived alone and reported more loneliness than adults residing with a spouse or non-marital partner. Implications: Living alone is not the only risk factor for loneliness in later life. Results suggest the importance for interventions aimed at reducing loneliness to target those living alone as well as those living with others, but not among those who live with an intimate partner.

MENTAL HEALTH CARE PREFERENCES OF YOUNGER ADULT AND OLDER HISPANICS

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Research on mental health service utilization patterns has shown that older adults under utilize outpatient services, particularly minority and ethnic populations. This often inadvertently places greater reliance on more expensive inpatient services when a mental health problem can no longer be ignored. In a prior study, Dupree, Watson and Schneider (2005) compared the attitudes and beliefs of African American and Caucasian older adults about mental health care preferences and preferred providers. Continuing this comparative approach, a Spanish language version of the original 47-item survey was administered to a convenience sample of 255 younger adult and old Hispanics at various community sites. They were surveyed regarding willingness to receive/consider services, preferred mental health care, preferred care providers, preferred locations of service, and personal barriers to care. Results showed similarities and differences in Latino adults' mental health care preferences and perceived barriers by age groups (< 65 vs. 65+), suggesting that policy makers and providers need to consider the impact of age, culture, and ethnicity in the development of appealing and culture appropriate outpatient mental health services.

CHARACTERIZATION OF EATING DISORDERS IN OLDER ADULTS: A REVIEW

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Eating disorders (ED) are thought to occur exclusively in adolescent and young adults, although a few older cases have been reported. We conducted a literature review of ED in older adults: (a) to determine if existing reports were consistent with DSM-IV diagnostic criteria for ED; and (b) to characterize existing cases based on gender, ED disorder type, precipitating factors, and psychiatric comorbidity. After completing a comprehensive scientific database search of ED in adults 50 and older, we identified 10 relevant articles of 25 cases. Twenty-two cases (88%) were women. Anorexia Nervosa (AN), restricting type was the most common diagnosis (44%), followed by AN binge/purge type (28%). Of the 23 cases reporting age of onset, 19 reported that ED occurred for the first time in middle to older adulthood, compared with only 4 reporting a history of adolescent ED. Loss of a loved one was the most common precipitant of ED and Major Depressive Disorder was the most common psychiatric comorbidity. The predominance of ED in women with comorbid depression parallels what has been described in young adults. We identified no cases of Bulimia Nervosa without Anorexia Nervosa in older adults, perhaps due to the physically strenuous nature of purging behaviors such as vomiting and exercise. The paucity of ED cases (n = 25) in older adults may be due to high mortality and poorer health of those who suffer the disorder at younger ages, although a diagnosis of ED should not be overlooked in this population.

RELIGION AND SPIRITUALITY IN THERAPY: PATIENT PREFERENCES AND RELATED CHARACTERISTICS

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Background: Religiosity is higher in older adults. Church attendance and certain forms of religious or spiritual coping are associated with decreased stress and depression. Thus, the integration of R/S into counseling may improve outcomes in older patients with anxiety and depression. However, little is known about patient preferences in this area. Methods: Sixty-six older adults from studies of the treatment of anxiety and/or depression in the Houston area completed the Client Attitudes toward Spirituality in Therapy (CAST), Brief Religious Coping

(RCOPE), Geriatric Depression Scale (GDS) and Santa Clara Strength of Religious Faith. The percentages and characteristics of patients preferring R/S interventions were assessed. Results: A majority of patients thought it would be important to discuss spiritual issues (44% extremely important, 39% somewhat important) or religious issues (26% extremely important, 35% somewhat important) in counseling. Those who found R/S issues extremely important reported more positive religious coping ($p \leq .005$) and greater strength of faith ($p < .001$) than the other patients. Those who found religious issues somewhat important had more negative religious coping ($p \leq .05$) than the other patients, and more depression than those who said it was not important ($p < .02$). Conclusions: The majority of older adults think that it is important to address spiritual or religious issues in therapy. This is likely to have future implications for treatment in this population.

AGING AND THE PERCEPTION OF MENTAL ILLNESS STIGMA

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Stigma associated with mental illness is a significant barrier to treatment for and recovery from mental illness throughout the world. Surprisingly, the extent of stigma and its implications for persons labeled as mentally ill did not decline significantly in the US with the advent of community-based treatment. However, it appears that younger, better-educated persons are less likely to attribute stigmatic characteristics to persons with mental illness. The purpose of this study is to examine the accuracy of this latter observation in the developing country of Nepal where stigma is strongly associated with mental illness for a variety of cultural, religious and economic reasons. We focus, particularly, on the role that elders in the community play in sustaining or modifying stigmatic perceptions. Although we expect that education might play a role in reducing stigmatic perceptions, we also suspect that, because elders are likely to suffer from physical disabilities that are also stigmatized, they will be more "open minded" regarding the stigma attribution. Data for the study come from interviews of 375 adults conducted in the village of Jiri, Nepal using the survey instrument from the "Stigma in Global Context: Mental Health Study" coordinated at Indiana University-Bloomington by Bernice Pescosolido. We expect that greater amounts of family burden from illness and disability reported among family members will be associated with less endorsement of stigmatic attributions for behavior. This will hold regardless of network position but is more likely to be observed among older persons because of potential personal implications of stigmatic attribution.

MEETING THE NEEDS OF THE GERIATRIC POPULATION: THE USE OF PSYCHOLOGY IN AN INTEGRATED HEALTHCARE SETTING

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The elderly has the highest rate of illness, disability and activity restrictions (Keuthen & Wisocki, 1991). Research shows that of those over age 65, 85% have at least one chronic medical condition, and more than 50% have two or more chronic illnesses (Black, Garcini & Baker, 2008). As the health and functional ability of older adults with chronic medical conditions decline, the risk of mental disorders increases (Ikes, 1998). Primary care is usually a constant source of health access and continued care among geriatric populations. Integrating mental health-care services into primary care, either in outpatient or inpatient settings, provides an effective way to reduce morbidity, improve quality of life, and promote successful aging (O'Donohue, Byrd, Cummings & Henderson, 2005). This review of literature provides a detailed overview on the role of psychology in primary care as a way to better address the

needs of aging medical patients. It aims at increasing awareness and promoting interest to include mental health services as a way to optimize patient health thorough biopsychosocial modes of prevention and intervention. Included in this review is a description of integrated healthcare; a discussion of how "primary care psychology" differs from traditional practice; a proposal of ways in which mental health providers may collaborate with physicians and other medical professionals to provide services and assist in case conceptualization; examples of psychological services valuable to geriatric populations and their caregivers; and an overview of the advantages, challenges, and ethics involved in the practice of integrated healthcare with older populations.

BELIEFS ABOUT MENTAL ILLNESS AND WILLINGNESS TO SEEK HELP ACROSS THE LIFESPAN

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Previous research suggests older adults hold some negative attitudes about mental illness compared to younger adults (Segal et al., 2005). This study further investigates attitudes about mental illness across the lifespan. Participants in three age groups (Younger: 35 years or less, $n = 144$; Middle-aged: years 36 to 65, $n = 219$; Older: 66 years and above, $n = 89$) completed the Willingness to Seek Help Questionnaire (WSHQ) and Beliefs Toward Mental Illness questionnaire (BMI). One-way between-groups ANOVAs revealed significant age differences regarding BMI Dangerousness subscale and BMI Poor Interpersonal and Social Skills subscale as well as BMI Total Score: $F(2, 451) = 5.75, p = .00$; $F(2, 451) = 4.65, p = .01$; and $F(2, 451) = 6.36, p = .00$, respectively. Post-hoc comparisons revealed that older adults scored significantly higher than middle-aged adults ($M = 11.76, SD = 11.32$; $M = 9.03, SD = 4.36$) on the Dangerous subscale and the Total Score ($M = 38.12, SD = 15.46$; $M = 45.88, SD = 23.56$). Furthermore, older adults scored higher on the Poor Interpersonal and Social Skills subscale than the younger and middle-aged groups ($M = 19.55, SD = 8.45$; $M = 16.71, SD = 7.63$; $M = 16.61, SD = 8.15$, respectively) which did not differ. There were no statistically significant age differences on WSHQ Total Score or BMI Incurability subscale. It is possible that older adults' stigmatized beliefs about mental illness may negatively influence their recognition of psychiatric symptoms and help-seeking behaviors.

PREDICTING PSYCHOLOGICAL WELL-BEING AMONG CENTENARIANS

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This study examined predictors of psychological well-being among centenarians across four domains (demographics, health, functional ability, and socioeconomic support). Sixty five participants from the Iowa Centenarian Study and who had fewer than 3 errors on the SPMSQ (Short Portable Mental Status Questionnaire) participated in this research. Autonomy and growth, two subscales of Ryff's (1995) psychological well-being measure, were used as outcome variables. Six pairs of multiple regression analyses showed that health and socioeconomic support were significant predictors for growth and autonomy among Iowa centenarians. In other words, higher levels of social support, economic status and better health were positively associated with better psychological well-being. The results suggest that social support and economic status are critical factors for psychological well-being among oldest old adults who live in rural settings.

DOES TIME HEAL ALL WOUNDS? THE IMPACT OF EVENT DISTANCE ON THE MENTAL HEALTH OF CENTENARIANS

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This study assessed the most important and most frequent life events report by centenarians and examined the influence of distance of the

time of the event on the mental health status (i.e. positive and negative affect) among centenarians of the Georgia Centenarian Study. One-hundred and thirty seven centenarians were interviewed about life events and how long ago they had occurred. On the frequency analyses, marriage was the most important and most commonly reported life event for centenarians. Several correlation analyses were conducted to assess the influences of time since the event occurred on the mental health status of oldest old adults. Length of time after the loss of a child was positively related to positive affect ($r = .05, p < .05$), suggesting that centenarians were more likely to report lower positive affect if they had lost a child more recently. Centenarians reported lower levels of positive affect if they had more recently experienced the worsening of the relationship to a child ($r = .08, p < .01$). Time of spouse institutionalization was negatively related to positive affect ($r = -.10, p < .05$), suggesting that centenarians were more likely to show lower positive affect if the experience of having a spouse institutionalized occurred a longer period ago. Overall our study demonstrates that stressful life events that happened more recently had a stronger impact on centenarians' mental health. In addition, centenarians generally had lower levels of mental health if they had experienced long-term exposure to a stressful life event.

THE EFFECTS OF AGE AND NEUROTICISM ON TWO MEASURES OF EMOTIONAL COMPLEXITY

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Older adults report greater emotional complexity than younger adults (e.g., Ready et al., 2008); however, it is possible that age-related findings are due to age-based differences in Neuroticism (Ong & Bergeman, 2004). The current study examined age and personality differences in positive (PA) and negative (NA) affected from the covariation and the heterogeneity perspectives. Covariation refers to the capacity to experience different emotions as independent (Carstensen et al., 2000; Ong / Bergemeian, 2004) whereas heterogeneity refers to the experience of multiple emotions over a period of time (e.g., Charles, 2005). Older age and low Neuroticism were expected to be associated with greater emotional complexity. Participants ($N = 1503$; 20-70 years) were from the Midlife in the United States (MIDUS) studies. PA and NA items were obtained using a brief PA/NA scale and an abbreviated PANAS. Neuroticism was assessed with a 4-item scale (Prenda & Lachman, 2001). Older age was associated with lesser covariation in PA and NA; however, this association was moderated by Neuroticism. Persons higher in Neuroticism had a more bipolar association between PA and NA than persons lower in Neuroticism. Age-related differences in heterogeneity in PA and NA were found. Controlling for Neuroticism, only NA heterogeneity remained significantly associated with age. Greater emotional complexity (i.e., lesser covariation) between PA and NA was found in older relative to younger adults. Older age also was associated with more heterogeneity in PA but lesser heterogeneity in NA. Overall, age-related differences were largely due to individual differences in Neuroticism.

EFFECTS OF ILLNESS TYPE AND GENDER ON PERCEPTIONS AND EMOTIONAL AND BEHAVIORAL REACTIONS TO MENTALLY ILL OLDER ADULTS

A. Webb, J.M. Jacobs-Lawson, *University of Kentucky, Lexington, Kentucky*

Inadequate knowledge of mental illness can lead to misconceptions and discrimination. The purpose of this study was to examine how illness type and gender influence how people perceive and react to mentally ill older adults. Participants ($N = 276$, aged 19-88 years, M age = 49.88) were presented with four vignettes depicting an older adult with a mental illness: depression, anxiety disorder, schizophrenia, or bipolar disorder. Participants were randomly assigned to either receive vignettes describing older men or older women. For each vignette, participants indicated their (a) perceptions (how responsible the older adult

was for his/her condition, and how dangerous and dependent on others the person was), (b) emotional responses (how much pity, fear and anger they felt toward the person), and (c) behavioral reactions (willingness to help and interact with the older adult). Results showed that schizophrenia and bipolar disorder were associated with the most negative reactions, while anxiety was treated as the least severe illness. Regardless of illness, participants' perceptions, emotional reactions and behaviors toward women were much more positive than they were toward men. This confirms that both illness type and the gender of mentally ill older adults affect how they are viewed and treated. This suggests that (a) the general public would benefit from programs aimed at educating individuals about mental illness in old age and (b) compared to older women, older men with a mental illness may need more support because of the increase in negative perceptions and potential stigma associated with mental illness for men.

AN EXAMINATION OF THE VALIDITY OF THE BARRIERS TO MENTAL HEALTH SERVICES SCALE

R. Pepin, D. Segal, *Psychology, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

The purpose of this study was to examine the convergent and divergent validity of a newly created questionnaire, the Barriers to Mental Health Services Scale (BMHSS) (Pepin, Segal, & Coolidge, in press), as well as conduct a principle components analysis to explore the underlying structure of this instrument. The BMHSS is comprised of 10 subscales representing possible barriers to mental health service utilization, conceptualized in two domains: intrinsic (e.g. stigma) and extrinsic (e.g. transportation concerns). Community-dwelling younger adults ($N=76$, $M=23.0$ years) and older adults ($N=88$, $M=71.4$ years) completed the BMHSS, the Beliefs toward Mental Illness Scale (BMI) (Cohen, 1999), the Willingness to Seek Help Questionnaire (WSHQ) (Hirai & Clum, 2000), and the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977). The stigma subscale was significantly and positively correlated with the BMI total score, $r(154) = .21$, $p < .01$. The help seeking subscale was significantly and negatively associated with the WSHQ, $r(152) = -.38$, $p < .00$. As predicted, the CES-D was not significantly correlated with either stigma, $r(149) = .08$, $p = .35$ or help seeking, $r(150) = -.15$, $p < .07$ subscales. A principle component analysis indicated one factor accounting for 23.3% of variance, another factor accounting for 10.2% of the variance, and a third factor accounting for 5.2% of the variance. An implication of this study is the preliminary evidence for the validity of the BMHSS provides support for further development of this instrument.

LONELINESS, TIME USE, AND EXPERIENCED AFFECT IN OLDER ADULTS

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Loneliness is a risk factor for poor health and cognitive decline among older adults. It is unclear to what extent the negative effects of loneliness are due to diminished social engagement or to emotional factors. We examined time use and affective experiencing among lonely vs. not lonely people using a modified version of the Day Reconstruction Method (DRM). The DRM is a survey method that is a hybrid of Ecological Momentary Assessment (EMA) and daily diary methods, and asks about the social context, affective experiences, and time use over a single day. In a sample of 47 community-dwelling adults 60 years and older, we dichotomized participants based on responses to a single-item question into lonely (sometimes or frequently) vs. not lonely (never or infrequently). We then assessed the proposition of time spent alone, time use, and affect ratings for events throughout the day (e.g., happy, interested, sad). The mean age of the 47 person sample was 75.5 ($sd=9$). Overall, 38% were lonely sometimes or frequently. Surprisingly, the group that endorsed loneliness spent marginally less time alone than the group that reported never feeling lonely (32% vs. 42%, respectively)

and the distribution of activities did not differ across groups. However, on affective experience, the group that endorsed loneliness has significantly lower ratings of "interested" collapsed across activities. In light of the small sample size, our diary-based study suggests that loneliness may have more to do with emotional responses to daily events than to time spent alone or distribution of activities.

RELATIONSHIPS BETWEEN COGNITIVE DETERRENTS TO SUICIDE, DYSFUNCTIONAL BELIEFS, AND HOPELESSNESS AMONG OLDER ADULTS

M. Marty, W. Meyer, D. Segal, *Psychology Department, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

The Reasons for Living Inventory (RFL; Linehan et al., 1983) measures cognitive deterrents to suicide with six subscales: survival and coping beliefs, responsibility to family, child-related concerns, fear of suicide, fear of social disapproval, and moral objections. However, in nonclinical samples of younger and older adults, higher fear of suicide has been associated with higher suicidal ideation, suggesting this is not a deterrent to suicide in this population (Linehan et al., 1983; Marty et al., 2008; Osman et al., 1993). To further explore this phenomenon, this study examined relationships between reasons for living, dysfunctional attitudes, and hopelessness in community-dwelling older adults. Participants ($N = 108$; M age = 71.50 years; $SD = 8.20$) completed the RFL, Dysfunctional Attitudes Scale (measure of attitudes that predispose individuals to depression), and Geriatric Hopelessness Scale (measure of pessimism and hopelessness). Correlational analysis revealed positive relationships between dysfunctional attitudes and fear of suicide ($r = .34$) and fear of social disapproval ($r = .35$) and a negative relationship with survival and coping beliefs ($r = -.25$). Further analysis revealed negative relationships between hopelessness and survival and coping beliefs ($r = -.36$), responsibility to family ($r = -.39$), child-related concerns ($r = -.24$), moral objections ($r = -.42$) and total reasons for living ($r = -.36$). As expected, hopelessness is moderately negatively related to deterrents to suicide. In contrast, dysfunctional attitudes are positively related to two types of deterrents, signifying these two RFL scales may not be accurate depictions of deterrents among healthy older adults.

ALCOHOL ABUSE PREVENTION FOR OLDER ADULTS: A SYSTEMATIC REVIEW OF THE RESEARCH LITERATURE

C. Egan, *University of Rhode Island, Providence, Rhode Island*

Alcohol abuse among older adults is a significant yet often unacknowledged problem (Blow, 2004) that is projected to increase in magnitude (SAMHSA, 2002). In fact, the number of older adults in need of substance abuse treatment is expected to double from 1999 to 2020 (SAMHSA, 2002). Despite the current prevalence and projected increase, efforts to prevent alcohol abuse in the older adult population have been limited (Bartels et al., 2005). This presentation describes the current state of the research on alcohol abuse prevention for older adults as determined by a systematic literature search of published studies from 1988 through March 2009 in four databases (PsycINFO, CINAHL, Medline, and Ageline). Identified studies were organized according to the Institute of Medicine (IOM) classification of universal, selective and indicated prevention strategies (Schinke, Brounstein, & Gardner, 2002). This literature review indicates that a full spectrum of prevention interventions for older adult alcohol abuse across the three IOM categories is currently lacking. Alcohol screening for universal or selected populations with brief intervention was the most frequently studied approach. Universal educational approaches for substance abuse prevention among older adults were identified, but the studies conducted were small scale. Barriers to the development of alcohol abuse prevention among older adults will be discussed along with future directions.

PREDICTORS OF PREVENTABLE NURSING HOME HOSPITALIZATIONS: THE ROLE OF MENTAL DISORDERS AND DEMENTIA

M.A. Becker, T. Boaz, R. Andel, A. Gum, A.S. Papadopoulos, *Aging & Mental Health Disparities, University of South Florida, Tampa, Florida*

Preventable nursing home (NH) hospitalizations place an enormous economic burden on an already overtaxed American healthcare system. Hospitalizations for “ambulatory-care sensitive” (ACS) conditions are considered preventable, as these are physical health conditions that can potentially be treated safely in a NH. Despite concern about the frequency of these events the prevalence and risk factors for such hospitalizations among residents with and without serious mental illness (SMI) and/or dementia have not been investigated. This study examined the importance of risk factors for hospitalization of NH residents with ACS conditions during FY 2003-2006. Investigators merged Medicaid and Online Survey Certification and Reporting (OSCAR) data for 72,251 Medicaid-enrolled NH residents in 647 nursing homes in Florida. We identified 10,091 ACS hospitalizations (18.5% of all hospitalizations). In a fully-adjusted proportional hazard regression, younger age, non-White race, dementia and serious mental disorder were associated with a greater risk of ACS hospitalization. In addition, residents with a diagnosed mental disorder and no dementia incurred relatively high expenditures for ACS hospitalizations. Among facility characteristics, participants from for-profit facilities, facilities that were not a member of a chain, facilities with more Medicaid recipients and facilities of smaller size (less than 120 beds) had increased risk of ACS hospitalizations. Attention to the identified predictors of hospitalization for ACS conditions, which are potentially preventable, could reduce the risk and cost of these hospitalizations among Medicaid-enrolled nursing home residents. The need to reduce unnecessary hospitalization will become only more urgent as the population ages and healthcare expenses continue to escalate.

THE NEO FIVE FACTOR MODEL AS A PREDICTOR OF SUICIDE RESILIENCE IN OLDER ADULTS

W. Meyer, M. Marty, D. Segal, *Psychology, University of Colorado @ Colorado Springs, Colorado Springs, Colorado*

In 2005, older adults (65+ years) completed 14.3 suicides per 100,000 people (CDC, 2007). Since personality can impact various aspects of thought and behavior, exploring interactions between personality and reasons for living in older adults is worthwhile. Previous research found a negative relationship between depression and extraversion in older adults (Useda et al., 2004). The present study examined relationships between personality and suicide resilience. Participants (N = 109, M age = 71.21 years; range = 60-95 years) completed the Reasons for Living Inventory (RFL) and the NEO Five-Factor Inventory (NEO-FFI). Correlational analyses revealed positive relationships between extraversion and survival and coping beliefs ($r = .50$) and total reasons for living ($r = .36$). Neuroticism was positively related to fear of suicide ($r = .40$) and negatively related to survival and coping beliefs ($r = -.31$). Openness was negatively related to moral objections ($r = -.51$). Agreeableness was positively related to survival and coping beliefs ($r = .43$). Conscientiousness was positively related to survival and coping beliefs ($r = .44$) and total reasons for living ($r = .34$). Multiple regression revealed the NEO-FFI predicted RFL total score $F(5, 80) = 4.0, p < .01$. The overall model with gender accounted for 21% of the variance in reasons for living. Extraversion made the strongest contribution. Consistent with previous findings (Useda et al. 2004), results indicated extraversion was the most powerful predictor of suicide resilience. The significant effect of conscientiousness on RFL was unexpected and warrants replication.

WHAT INFLUENCES SUBJECTIVE WELL-BEING IN THE CHINESE ELDERLY? THE ROLE OF RESOURCES AND ACTIVITY

J. Li, B. Dai, Z. Wu, *Institute of Psychology, Chinese Academy of Sciences, Beijing, China*

This study examined the role resources and activity play for subjective well-being (SWB) in the Chinese elderly with a hypothesis that active participation is a mediator between stable resources and perceived well-being in later life. A national-wide representative Chinese sample of 3795 older adults (aged 60-101 years) were required to fill out Memorial University of Newfoundland Scale of Happiness (MUNSH) as outcome measure of SWB. Subjective health condition as personal resource, economic status and family relations as social resources and amount of activity were compiled from scores on self-design items. The results showed that all resource and activity factors were significantly related to SWB with a descending order of family relations, economic status, amount of activity and subjective health condition. The authors constructed a structural model in which subjective health condition, economic status, family relations and amount of activity all directly predict SWB, and moreover the effects of resources are mediated through active participation. Data were found to provide a satisfactory fit index of the model ($GFI=0.97$, $TLI=0.94$, $CFI=0.96$, $RMSEA=0.06$). Resources explained 33% of the variance in activity, and the total model explained 69.5% of the variance in SWB. The findings provide empirical backing for the assertion that health, participation and security are three important pillars for active aging. The most influential role of family relations for SWB was discussed in the context of Chinese culture compared to the western.

PREVALENCE AND CORRELATES OF SUICIDALITY IN COMMUNITY-DWELLING OLDER ADULTS: THE NATIONAL COMORBIDITY SURVEY REPLICATION

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Purpose: Little is known about suicide-related behavior in older adults. We determined nationally representative estimates of the prevalence and correlates of suicidality among older community-dwelling adults. **Methods:** The data are from a population-based probability sample, the National Comorbidity Survey Replication (NCS-R), a study of 9,282 participants 18 years and older. For this analysis, we examined 1,372 participants aged 55 and older [41% 55-64; 33% 65-74; 26% 75+]. Suicide-related behavior was assessed by self-report, including serious thoughts, plans, and attempts (i.e., gesture or intent to die). Mood and anxiety disorders were assessed by the WMH-CIDI, using DSM-IV criteria. Analyses included frequency measures and logistic regression using weights and complex design-corrected statistical tests. **Results:** Of respondents, 9.5% reported lifetime ideation, 2.4% a plan, 1.3% a gesture, and 1.2% an attempt (with intent to die). Most suicidality occurred in the youngest cohort (55-64), significantly declining with age ($p < 0.05$). Besides age, significant correlates included education, marital status, race/ethnicity, and regional differences. Gender differences were only significant for lifetime suicide attempts, where women had greater odds than men ($OR=4.8$, 95% $CI=1.5-15.0$). Of psychiatric disorders, dysthymia ($OR=6.6$, 95% $CI=3.7-12.0$), major depressive disorder ($OR=6.0$, 95% $CI=4.7-7.6$), and posttraumatic stress disorder ($OR=8.7$, 95% $CI=5.6-13.5$) had the highest association with suicide-related behavior. **Conclusions:** This is the first comprehensive study of prevalence rates of suicidality in older Americans based on a national sample. Sociodemographic and DSM-IV mood and anxiety disorder correlates of the occurrence of ideation, plans for committing suicide, and lethality of suicide attempts are discussed.

PROVISION OF MENTAL HEALTH SERVICES IN NURSING HOMES

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Objectives: To examine mental health services provided to a whole population of newly admitted Florida nursing home (NH) residents (N=1049) over a one-year period. **Design:** Secondary analyses of selected variables from Medicaid and the On-line Survey and Certification and Reporting System. **Results:** Within 3 months of admission, nearly three quarters of all new NH residents received some form of mental health treatment. Approximately 12% received nonpsychopharmacological mental health care. On the other hand, 72% of new residents received at least one psychoactive medication, and more than 15% were taking four or more psychoactive medications. Most of those being treated with psychoactive medication had not received psychopharmacological treatment the year before admission (58%), and had not received a psychiatric diagnosis the year preceding admission (84%). Receipt of psychopharmacological and non-psychopharmacological mental health services was associated with younger age. **Conclusion:** Results expand on past research by identifying an increase in the amount of psychoactive medications prescribed to NH residents, a lack of prior psychiatric treatment and diagnoses for those currently receiving psychoactive medications, and only limited provision of non-psychopharmacological mental health care.

ASSESSING ANXIETY IN NURSING HOME RESIDENTS WITH DEMENTIA

L.S. Hess, S. Shah, S. Meeks, *Psychological and Brain Sciences, University of Louisville, Louisville, Kentucky*

Anxiety and agitation are common in older adults with dementia. Anxiety is often manifested in people with dementia as agitation, but agitation can be caused by multiple problems, increasing both the importance and the difficulty of assessment. Appropriate anxiety assessment instruments for older adults with dementia will result in more accurate assessment and improved direct treatment and symptom management. The purpose of this pilot study is to better understand anxiety in older adults with dementia residing in nursing homes and to examine the factor structure of the Rating Anxiety in Dementia (RAID) scale as used with this population. Nursing home residents age 65 and older with a dementia diagnosis as indicated in their charts and their primary Certified Nursing Assistants (CNAs) completed the RAID at baseline. At one-week follow-up, residents and CNAs completed the RAID. Preliminary reliability analyses for residents' responses (n=10) to the RAID indicate Cronbach's $\alpha = .496$, suggesting inadequate internal consistency when the RAID is administered to residents. Separate reliability analyses for CNAs' responses (n=17) to the RAID demonstrated acceptable internal consistency with Cronbach's $\alpha = .794$. These initial findings suggest there may be better reliability when administering the RAID to CNAs. When the sample is completed in August 2009, statistical analyses will include a larger sample size (N=100) from which the RAID's internal consistency, test-retest reliability, and correspondence between CNA and resident forms will be examined. Also, factor analyses will be conducted to explore and confirm item loadings onto factors representing anxiety and agitation within the RAID.

SESSION 170 (SYMPOSIUM)

MENTORING ACROSS THE GEROPSYCHOLOGY CAREER: PERSPECTIVES FROM THE EXPERTS

Chair: J.A. Zimmerman, *Department of Psychological and Brain Sciences, University of Louisville, Louisville, Kentucky*
Discussant: A. Fiske, *West Virginia University, Morgantown, West Virginia*

Clinicians, researchers, medical professionals, and faculty alike generally find themselves as both mentor and mentee at some point throughout their training and professional careers. Being a mentor to students and junior colleagues can be a rewarding experience, although at times finding the best mentoring approach for the mentee's level of development can be challenging. Likewise, individuals in the mentee role often struggle to find appropriate mentors who can provide support, guidance, and information to help them navigate their current professional role. The goal of the current symposium is to provide information on mentoring, for mentors and mentees alike, from expert mentors in the field of geropsychology. Presenters will offer their perspectives on mentorship at various levels of training. Bob Knight, Ph.D. will discuss mentoring in the context of clinical psychology doctoral training, emphasizing a student-centered approach. Michele Karel, Ph.D. will draw on her role as a geropsychology internship and postdoctoral training supervisor to discuss issues that arise as students transition into independent professionals. Peter Lichtenberg, Ph.D., will discuss mentoring for junior faculty members, focusing on the tasks expected of junior faculty members and what a mentor to junior faculty has to offer. Keith Whitfield, Ph.D., will discuss the role of diversity in mentor-mentee relationships, providing guidance for both mentors and mentees when the mentoring involves members of ethnic minorities and other disadvantaged groups. Amy Fiske, Ph.D., of the Society of Clinical Geropsychology Mentoring Committee, will serve as discussant.

MENTORING SPECIAL POPULATIONS

K.E. Whitfield, C.L. Edwards, *Psychology and Neuroscience, Duke University, Durham, North Carolina*

Mentorship is critical for career development of junior scholars as well as seasoned professionals. Members of special populations are at increased risk of information shortfalls. In addition to the usual features of mentor/mentee relationships, there is special knowledge and skills needed to successfully mentor members of ethnic minorities and other disadvantaged groups. Midlevel and senior scientists need specialized mentoring on how to transition to the next levels of their career and on how to mentor the next generation of scientists. This presentation will focus on what mentors need to know to serve the needs of ethnic minorities in the new information age; how to navigate cross-group mentor/mentee relationships (e.g., cross race, cross gender); what mentees need to know in the selection of mentors; and how to be a good mentee. The pit falls of peers will also be discussed. The presentation will also discuss potential sources for mentorship opportunities.

MENTORING IN CLINICAL GEROPSYCHOLOGY AT THE DOCTORAL PROGRAM LEVEL

B.G. Knight, *U of Southern California, Los Angeles, California*

Mentoring at the doctoral program level includes assuring that the student gets the appropriate knowledge base, research experiences, and basic clinical skills to prepare for a career in clinical geropsychology. A student-centered approach to mentoring follows the student's career goals and life circumstances and builds on existing strengths. Challenges include guiding students to be confident in as yet unrecognized strengths and to become aware of and change unconscious ageism. Helping students publish, develop national connections in geropsychology, and think broadly about career options are key goals at this level of training.

THOUGHTS ON MENTORING PREDOCTORAL PSYCHOLOGY INTERNS AND POSTDOCTORAL FELLOWS

M.J. Karel, 1. VA Boston Healthcare System, Brockton, Massachusetts, 2. Harvard Medical School, Boston, Massachusetts

Psychology internship and fellowship training years represent critical developmental and transitional times for clinical and counseling doctoral trainees. Interns and Fellows typically work with supervisors for one year, or less, yet may seek mentoring around a range of important professional developmental issues. These issues include finding one's voice in transitioning from a student to an independent professional psychologist, questions about career development (what do I really want to do and how shall I get there?), and concerns about work-life balance. This talk will address the experiences of one geropsychology internship and postdoctoral training supervisor, as she has navigated the roles of supervisor, teacher, mentor, role model, colleague, and friend, at the same time as she herself has been developing from an early- to mid-career psychologist. Comments will include reflection on feedback from past students, and colleagues, about mentoring at internship/postdoctoral levels, and consider that mentors also benefit from mentorship.

MENTORING JUNIOR FACULTY

P.A. Lichtenberg, Wayne State University, Detroit, Michigan

Junior faculty are full fledged members of the academy, with all of the credentials and training that can allow them to succeed as independent scholars. Nevertheless, mentoring can be especially impacting and meaningful for junior and senior faculty alike. Based on my experiences as a mentee and a mentor, unique aspects of junior faculty mentoring will be explored. Junior faculty undergo a major transition; from student to colleague. The ways in which they evaluate themselves and their progress changes dramatically. A mentor to junior faculty can offer practical, strategic and emotional guidance. Major tasks for the mentor include providing empowerment, support, a review of the fundamentals of an academic job and strategic decision making. Enhancing a junior scholar's comfort in charting their own research trajectory, as well as focusing on ways the junior scholar can connect with others in the field can assist with increased confidence and productivity.

SESSION 175 (SYMPOSIUM)

PERSON-ENVIRONMENT FIT: AN IMPORTANT EVALUATIVE DIMENSION FOR PRODUCTIVE AGING IN THE WORK CONTEXTS - FIRST RESULTS FROM THE DEMOPASS PROJECT

Chair: U.M. Staudinger, Jacobs Center, Jacobs University Bremen, Bremen, Germany

Discussant: R. Kanfer, Georgia Institute of Technology, Atlanta, Georgia

Demographic aging in modern industrialized nations has raised the question whether an aging workforce represents a risk for the productivity of individual companies and the economy as a whole. In the present symposium, first results from a large-scale interdisciplinary study of the aging workforce, called Demopass (demography + passung (engl. fit)), are presented. The central tenet of the study is that not only attitudes and competences of the employees, team attitudes, or attitudes of supervisors, and management strategies as such are important predictors for productivity and employees' health but also how those fit together. Using a multi-level data set, the studies presented in the Symposium provide examples for how the person-environment fit has predictive power over and above characteristics of employees, teams and management strategies. Thus, the symposium presents evidence on the relevance of person-environment fit for the productivity and health of older employees for the following areas: the fit between workplace requirements and workers' competencies had detrimental effects in for older workers but not only for them (Trautmann, Voelcker-Rehage &

Godde), the effect of the need-supply fit on training participation (Stamov-Rossnagel), the effect of the fit between self-other performance evaluations on training opportunities (Schömann, Baron), the effect of the fit between team characteristics and dispositional goal orientations (approach-avoidance) (Heidemeier), and the fit between age stereotypes and individual age attitudes proved to be predictive of work-related outcomes (Bowen & Staudinger). For all areas under study significant effects of the fit/misfit were identified. Results are discussed by Ruth Kanfer, an expert in the area of aging workforce management.

FIT FOR TRAINING? EFFECTS OF AGE-DIFFERENCES IN PERSON-ENVIRONMENT FIT STYLE ON TRAINING PARTICIPATION

C. Stamov-Rossnagel, Jacobs Centre on Lifelong Learning, Jacobs University, Bremen, Germany

Research on person-environment fit has reliably demonstrated associations of fit with attitudinal outcomes. Much less evidence is available, however, on the effects of fit on behavioral measures. Moreover, age-related differences in fit perceptions have only rarely been studied. Recent evidence suggests that the relative contributions of different fit dimensions might differ with worker age, creating age-specific "fit styles". In a survey of 746 workers from three companies in the automotive industry, we therefore assessed the contributions of workers' needs-supplies fit and demands-abilities fit perceptions on training-related goals and on training participation. To assess the role of age differences, we recruited workers from 18-65 years old. Perceived needs-supplies fit emerged as a predictor of training participation regardless of worker age, whilst demands-abilities fit was a strong predictor only for workers in the 51-65 years age bracket. Our results might be used to inform research into age-differentiated motivational interventions for job-related training.

FIT BETWEEN WORKERS' COMPETENCIES AND JOB DEMANDS AS PREDICTOR FOR JOB SATISFACTION AND PRODUCTIVITY OVER THE WORK CAREER

M. Trautmann, C. Voelcker-Rehage, B. Godde, Jacobs Center on Lifelong Learning, Jacobs University, Bremen, Germany

A fit between workers' competencies and demands clearly is a precondition for good job performance. A misfit may hamper job satisfaction and health and thus be a reason for less productivity. Reports on adaptive competency and work demands in sensory, motor, and cognitive abilities, and work quality were obtained from 105 employees of a production company and their respective supervisors. Based on these assessments, employees 30 years and younger, but not older workers, were found to be overly challenged by the complexity of their tasks. Furthermore older workers' (> 45 yrs.) abilities were strongly underestimated by their supervisors as compared to the self-ratings. Both types of misfit were strongly negatively correlated with work satisfaction. We conclude that a fit between work demands and self and supervisor ratings of adaptive competencies has to be constantly evaluated to maintain healthy and productive employees.

SITUATIONAL INFLUENCES ON ACHIEVEMENT GOALS: IMPLICATIONS FOR MANAGING AN AGING WORKFORCE

H. Heidemeier, Jacobs Center on Lifelong Learning and Institutional Development, Bremen, Germany

This study examines the influence that trait and state aspects of goal orientation have on learning self-efficacy. Dispositional learning- and performance-goal orientations had direct and mediated effects on learning self-efficacy. Two classes of state achievement goals (learning-approach and learning-avoid) acted as mediating states. The assumption is that depending on the fit or misfit between dispositional goal orientations and team characteristics, psychological consequences for the individual employee differ. Based on a sample of 81 work teams (742 employees, age: 21 to 62), multivariate multilevel regression con-

firmed that dispositional goal orientations interacted with team characteristics (competition, helping behavior, goal interdependence) in predicting achievement goals (states). That is, team characteristics and individual goal orientations were identified as relevant dimensions of a person-environment fit. The maladaptive consequences of learning-avoid achievement goals (state) were stronger among older adults. Implications of these findings for managing an aging workforce are discussed.

EXPLANATIONS FOR FITS AND MISFITS IN TRAINING EXPECTATION AND ITS CONSEQUENCES FOR THE AGEING WORKFORCE

S. Baron, K. Schömann, *Jacobs University Bremen, Bremen, Germany*

A better understanding of the influence of direct supervisors is essential for improving training participation of older employees. Since supervisors make the final decision for or against participation in training courses they have an active role in promoting training. However, decisions about whom to send to further training often relies on expected training benefits, employees' productivity, and career opportunities. We expect that age serves as a screening device to sort out individuals who are apparently 'not suitable' for training. Our dataset allows an integrated analysis of individuals' attitudes toward training and personalized appraisals by their supervisors. We develop a taxonomy of fits/misfits in three fields important for participation: the evaluation of employees' productivity, learning efficacy and the willingness to learn. The results of multinomial logit models of two levels show that the likelihood to be evaluated worse than colleagues increases with age, although individuals evaluate themselves better than colleagues.

AGING INTO THE MOLD: AGING WORKERS AND AGE STEREOTYPES WITHIN COMPANIES

C. Bowen, U.M. Staudinger, *Jacobs Center on Lifelong Learning and Institutional Development, Bremen, Germany*

Demographic change and an aging workforce have rendered the fit between employees, who age within a company, and the aging attitudes and age stereotypes within the company particularly important. We introduce the construct of *psychological age climate*, that is, employees' perceptions of the age stereotypes about older workers within their organization. Using multi-level data from two companies with a total of 355 employees nested in 36 work teams, we demonstrate the validity of the Psychological Age Climate Scale (PACS-10) (Noack, Bowen, & Staudinger, 2009) and demonstrate how the fit between aging employees, their own aging attitudes, and the age stereotypes salient within a company predict important job-related outcomes.

SESSION 180 (PAPER)

STIGMA AND "ISMS" ABOUT AGING

ATTITUDES TO AGEING AND THE EXPERIENCE OF AGEISM: EXPLORING THE VIEWS OF MID-LIFE AND OLDER ADULTS

O. Ann, J. Lynam, N. Gregory, P. McParland, *Nursing, Dundalk Institute of Technology, Dundalk, Ireland*

Introduction: Attitudes to ageing and the experience of ageism have both been shown to influence older people's quality of life and well-being. Surprisingly, no studies have examined attitudes to ageing among mid-life and older adults in Ireland. The aim of this study is to examine mid-life and older adults' attitudes to their own ageing, and to determine the prevalence and consequences of ageism on health and well-being. Methods: Participants are community based mid-life (aged 50+ years) and older adults (n=1000). Measures include the General Attitudes to Ageing Survey (GAAS), the Expectations Regarding Aging Survey (ERA-12), and the newly developed Experiences of Ageism Survey. Well-being was assessed using measures of pathology and well-being including the Hospital Anxiety and Depression Scale (HADS-A),

and psychological well-being (Ryff, 1998). Results: Results to date show that the measures have good psychometric properties. Furthermore, results indicated significant associations between attitudes to ageing and the experience of ageism, i.e. people who had the most negative attitudes about their own ageing, were those who perceived others as having negative towards them. Attitudes were also associated with poorer psychological health and well-being. Conclusion: Attitudes to ageing can impact adversely on health and well-being. The current study suggests that attitudes to ageing can be understood in the context of wider social relationships and perceptions about the ways others view the individual. Further research in this area can promote optimal well-being and quality of life for more people.

DISENTANGLING INDIVIDUAL VIEWS ON AGING AND HEALTH IN LATER LIFE: FINDINGS FROM A 12-YEAR LONGITUDINAL STUDY

S. Wurm, O. Huxhold, B. Schüz, C. Tesch-Roemer, *German Centre of Gerontology, Berlin, Germany*

Background: It is a long-standing assumption in aging research that individuals' attitudes towards their own aging influence the way people age. For quite some time, there was only sparse empirical evidence for this claim, but recent studies have shown that a positive view on aging affects health in later life. Cross-sectional and unidirectional studies, however, cannot rule out that individual views on aging have been formed by health experiences, which in turn causes the observed relations. Methods: This study tries to disentangle the multidirectional nature of the view on aging-health relation by applying dynamic lead-lag models to longitudinal data of the German Ageing Survey covering 12 years of time and three waves of measurement (n = 1000). Results: First findings suggest that both directions of causality are important. The impact of individual views of aging on health, however, seems to be stronger than the reciprocal effect, thus pointing to the potential of individual views on aging as target in health promotion programs in older people.

YOUNG ADULT ATTITUDES ABOUT ALZHEIMER'S DISEASE

T. Lundquist, R. Ready, *University of Massachusetts Amherst, Williamstown, Massachusetts*

The current generation of young adults will be greatly affected by Alzheimer's disease (AD), but little is known about their attitudes toward persons with Alzheimer's disease. The current study assessed attitudes about Alzheimer's disease in young adults with varying levels of contact with the disease. It was hypothesized that participants who had a high level of contact with someone with Alzheimer's disease previously, in the form of a close relationship, would report more positive attitudes than participants with a low level of contact or no contact. Results revealed that participants who had a high level of contact with persons with AD were more willing to make personal sacrifices for Alzheimer's disease than those who had no contact. Younger persons may realize a greater need to support persons with Alzheimer's disease if they have been personally affected by the disease through a close relationship.

INCREASING AWARENESS AND BUSTING STIGMA ABOUT OLDER ADULT DEPRESSION AND SUICIDE

D. Fuentes¹, S. Jaccard², D. Waugh², S. Shepherd^{2,3}, B. Reinhardt², M.C. Halpain³, 1. *School of Social Work, University of Southern California, Los Angeles, California*, 2. *NAMI San Diego, San Diego, California*, 3. *University of California, San Diego, San Diego, California*

In the United States, approximately 20% of older adults in the community and nearly 50% in nursing homes suffer from depression (APA, 2003). Older adults have the highest suicide rates of any age group, and depression has been found to be a leading risk factor (CDC, 2009; Conwell et al, 2000). Considering that older adults comprise 12.5% of the U.S. population (US Census, 2007), depression and suicide among

this growing population is of great concern. Yet, stigma, lack of awareness of depression symptoms, and the manner in which older adults perceive, present or express depression makes the detection and treatment of depression among older adults challenging (NIH, 2007). In San Diego, California, an educational video titled *More than Just the Blues* was developed by an academic-community partnership to increase community awareness and decrease stigma surrounding older adult depression and suicide. Using the principles of Community-based Participatory Research (Israel et al., 2001; Viswanathan et al., 2004), the Senior Mental Health Partnership has developed and utilized this video to spread the message that depression is not a normal part of aging, it is an illness like any other, and that there is help. Through personal testimonies from older adults with depression, their families, survivors of suicide, and mental health professionals depicted in the video, the audience learns about signs and symptoms of depression. This session provides process and outcome results from the development and utilization of this video as a tool to increase individuals' awareness of older adult depression and suicide and reduce related stigma.

SESSION 185 (SYMPOSIUM)

SUCCESSFUL AGING: LOOKING BACKWARD, LOOKING FORWARD

Chair: R.A. Pruchno, *New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey*

Discussant: L. Poon, *University of Georgia, Institute of Gerontology, College of Public Health, Athens, Georgia*

The term "successful aging" has been in our vernacular since the days of Cicero and has featured prominently in gerontological studies since 1987 when Rowe and Kahn published their landmark paper. Yet a host of conceptual and methodological problems remain regarding what successful aging is, who defines it, and how it should be measured. The most significant debate surrounding the concept of successful aging has centered around the extent to which it is objective; hence identified externally according to specific criteria, or subjective, based on individual perceptions. The Baby Boom generation's size alone brings the quest for successful aging to the fore of policy debates. The objectives of this session are to examine state-of-the-art issues regarding successful aging and to identify productive directions for future studies. A panel of scholars from disciplines including psychology, sociology, nursing, and medicine will examine the history of the concept, its measures, and salient findings. We will discuss theoretical models about successful aging that have developed from within each discipline and identify ways to increase cross-discipline dialogue. Our conversation will focus on the extent to which successful aging is conceptualized as objective, subjective, static or process-based, and the degree to which it is modifiable. Presentations will highlight the importance of increasing communication between scientists from different disciplines as they examine how age, health, and functional ability affect the extent to which people are viewed as aging successfully. Panelists will identify research questions and future directions for scholars of successful aging to pursue

SUCCESSFUL AGING: THE MACARTHUR FOUNDATION LEGACY

J. Rowe, *Columbia University Mailman School Public Health, New York, New York*

The term 'successful aging' (SA) has influenced the scientific literature for over 50 years. In 1984 The MacArthur Foundation established a National Research Network on Successful Aging. The major goals of the network were to identify the characteristics that were predictive of SA, determine the prevalence and course of SA over time, and elucidate the degree to which the determinants of SA were inherited. Several criticisms of the Network's formulation of SA have appeared and will be addressed. The Network, however, has had a significant impact

on the field. There have been hundreds of articles and scores of books on this topic as well as regular conferences and sessions at National meetings. The terms 'successful aging, Rowe and Kahn,' have received over 400,000 hits on Google and the broader term 'successful aging' has received millions. Eight universities have established formal research centers dedicated to the study of successful aging.

SUCCESSFUL AGING: IN THE EYE OF THE BEHOLDER OR NOT?

R.A. Pruchno¹, M. Rose², M. Wilson-Genderson¹, F.P. Cartwright¹, 1. *New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey*, 2. *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

Distinctions between people characterized as aging successfully according to objective and subjective criteria are examined using data from 5,688 persons aged 50-74 living in New Jersey. Four groups of people are contrasted using ANOVAs: (1) not successful according to both objective and subjective criteria (Unsuccessful), (2) successful according to subjective but not objective criteria (Resilient), (3) successful according to objective but not subjective criteria (Disenchanted), and (4) successful according to both criteria (Successful). Results revealed that the Unsuccessful were most likely to be divorced, have the lowest levels of social support, and highest rates of smoking; the Resilient were oldest, most likely to be female, and Black; the Disenchanted had the highest level of education; and the Successful were most likely to be married, and to exercise. Findings are used to suggest new conceptual directions for understanding successful aging.

SUCCESSFUL AGING AS PROCESS VS. PRODUCT: THE ROLE OF AGENCY

E. Kahana¹, B. Kahana², 1. *Sociology, Case Western Reserve, Cleveland, Ohio*, 2. *Cleveland State University, Cleveland, Ohio*

This paper traces the development of the Preventive and Corrective Proactivity (PCP) Model of Successful Aging (Kahana & Kahana, 1996) from initial formulation to recent elaborations. This model offers a process based orientation to successful aging, integrating the stress paradigm with the self regulation literature. The PCP model posits the important influence of proactive behaviors in addition to external resources and personal dispositions as factors which ameliorate adverse effects of normative stressors in late life, and thereby facilitate successful aging. Temporal and spatial contexts of successful aging were articulated subsequent to the original formulation, recognizing structural influences on human agency (Kahana & Kahana, 2003). Emergent adaptations, including technology use and health care consumerism were next incorporated in the model (Kahana, Kahana, & Kercher, 2003). Our latest formulation of Targeted Proactivity (TAD) (Kahana & Kahana, in press) specifies the value of tailoring proactive behavior to adaptive tasks posed by normative stressors.

SUCCESSFUL AGING IN THE CONTEXT OF NURSING-WHO, WHAT AND HOW

M.T. Flood, *School of Nursing, UNC Charlotte, Charlotte, North Carolina*

Although the phenomenon of successful aging has interested researchers for decades, it has caught the attention of nurse scientists more recently than this. The speaker's presentation will provide an overview of the research and theoretical literature on successful aging from the nursing perspective. Commonalities and differences in successful aging conceptualizations within nursing and between nursing and other disciplines will be presented, as well as an overview of findings from research on successful aging done by nurse scientists. Key questions about successful aging and the role of nurses will be discussed as well as future needs and directions related to research and clinical practice.

SESSION 190 (SYMPOSIUM)

THERE'S NO PLACE LIKE HOME: MEASURING CULTURE CHANGE IN NURSING HOMES

Chair: M.J. Bott, *School of Nursing, University of Kansas, Kansas City, Kansas*

Discussant: L. Grant, *University of Minnesota, Minneapolis, Minnesota*

Innovative models for living in nursing homes that focus on quality of life for residents and quality of work for staff are emerging. Models of culture change also referred to as resident-focused or resident-centered care are being implemented. Culture change focuses on creating "homes" for residents within the nursing home environment. Residents living in their "home" have choices about their daily activities, develop relationships with the staff that care for them, and maintain independence in decision making. Staff are empowered to make decisions about their work life and ways to improve resident care. Because of their interest in Kansas nursing homes adopting culture change models, the Kansas Department on Aging commissioned our interdisciplinary team of nurses, a biostatistician, an economist, and social scientists to develop, refine, and test the psychometric properties of a measure of culture change, the Kansas Culture Change Instrument (KCCI). The purpose of this symposium is to describe the development of the KCCI and the relationships among culture change with quality of care. The first presentation will include a description of the culture change movement that includes definitions along with different approaches to culture change. The second and third presentations will describe the development of the KCCI including pilot testing and the results of the psychometric testing. A biostatistician will follow with a description of a new method, integrated analysis, for combining expert data with participant data. Lastly, an economist will report the findings about the relationships of the elements of culture change with quality of care.

CULTURE CHANGE: WHAT IT IS AND IS NOT

A.M. Becker, V. Coffland, M.J. Bott, *School of Nursing, University of Kansas, Kansas City, Kansas*

The size of the elderly population has grown over the last two decades and will continue to rise rapidly in the coming years. The number of older adults residing in nursing homes is expected to increase from 1.6 million in 2000 to 4.6 million in 2030. Despite increased nursing home oversight in recent decades concerns about quality of care still exists in nursing homes. Culture change began as a grass roots movement in the 1990s and is an effort to make nursing homes less like institutions and more like homes while maintaining quality of life for those who live and work there. Core values include increasing resident choice and autonomy, staff empowerment, decentralized decision making, and creating a homelike setting. The purpose of this presentation is to provide an overview of what constitutes culture change including the Commonwealth Fund definition and different models for culture change.

DEVELOPMENT OF A NURSING HOME CULTURE CHANGE INSTRUMENT

V. Coffland, D.K. Boyle, A.M. Becker, M.J. Bott, *School of Nursing, University of Kansas Medical Center, Kansas City, Kansas*

The purpose of this study was to develop and refine an instrument of culture change. Following conversations with experts and a literature review for culture change measures, a decision was made to construct and test items for staff and leader versions of a culture change instrument. Using the 2006 Commonwealth Fund definition and 25 care practices from the Colorado Foundation for Medical Care as the theoretical framework, items for six culture change domains were proposed. Six content experts reviewed 85 items: 54 items exceeded the content validity index of 0.78; 20 items were deleted; 12 items were revised, and 23 new items were added. Staff and leadership versions of the tool were pilot tested in 12 nursing homes. Initial reliabilities across the seven

subscales were 0.75-0.96 (leaders) and 0.79-0.94 (staff). Correlations ($r = .17 - .75$) among the 7 subscales and known culture change measures provided beginning evidence of validity.

PSYCHOMETRIC TESTING OF THE KANSAS CULTURE CHANGE INSTRUMENT (KCCI)

M.J. Bott, B. Gajewski, D.K. Boyle, R.H. Lee, A.M. Becker, V. Coffland, N. Dunton, *School of Nursing, University of Kansas, Kansas City, Kansas*

The purpose of this study was to examine the psychometric properties of the leader and staff versions of the Kansas Culture Change Instrument (KCCI) that was developed using the Commonwealth Fund definition and the care practices established by the Colorado Foundation for Medical Care. Leaders ($n = 1,596$) and staff ($n = 2,260$) from 223 Kansas nursing homes (64% response rate) provided data on seven subscales of culture change. Across the seven subscales, coefficient alphas ranged from .74 - .94 (staff) and .75 - .94 (leaders). Confirmatory factor analysis provided evidence of validity of the internal structure with adequate model fit ($\chi^2 = 8,876.27$, $df = 1,802$, $p \leq .001$; CFI = 0.89; RMSEA = 0.04). Scores across the seven subscales were significantly ($p < .05$) higher between homes who had extensively implemented culture change and homes with limited culture change. Evidence of reliability and validity of the KCCI was demonstrated.

INTEGRATED ANALYSIS OF CONTENT AND CONSTRUCT VALIDITY OF A CULTURE CHANGE INSTRUMENT

B. Gajewski, V. Coffland, D.K. Boyle, M.J. Bott, *University of Kansas Medical Center, Kansas City, Kansas*

Psychometric evaluation of instruments entails evidence based on content and internal structure. Content validity evidence includes experts' evaluations of the extent to which items match the definition of the construct. Internal structure evidence includes factor analytic studies and examination of item interrelationships based on data from participants. The experts' and participants' data traditionally are analyzed separately. We propose to integrate the experts' and participants' data seamlessly to establish validity evidence. The challenge is placing both on the same metric. A framework for accomplishing this goal is via a fully Bayesian model that treats the expert data as a prior distribution that is updated to a posterior distribution using participants' data. The approach is applied to an instrument designed to measure nursing home culture change. The purpose of the presentation will be to demonstrate the method and show how this results in more stable estimates of usual psychometric parameters.

OUTCOMES OF NURSING HOME CULTURE CHANGE

R.H. Lee^{2,1}, N. Dunton^{1,2}, B. Gajewski^{2,1}, D.K. Boyle¹, V. Coffland¹, A.M. Becker¹, M.J. Bott¹, *1. University of Kansas School of Nursing, Kansas City, Kansas, 2. University of Kansas School of Medicine, Kansas City, Kansas*

The purpose of this study was to examine the relationship between the elements of culture change and quality of care in nursing homes. Leaders ($n = 1,596$) in 222 nursing homes in Kansas (63%) provided data. Using two questions from the Kansas Culture Change Instrument (KCCI)—how much had the nursing home been involved in culture change and for how long—three groups of nursing homes were identified: 18% had limited involvement in culture change; 52% had partial involvement; and 30% had extensive involvement. Measures of quality of care included turnover (2007 Medicaid cost reports), deficiencies (OSCAR), and quality indicators (MDS). The 30% of Kansas nursing homes with extensive involvement in culture change had below average turnover. Deficiencies were less common in homes with more involvement in culture change. No appreciable differences were noted for Quality Indicators. Implementation of culture change impacted the quality of care in Kansas nursing homes.

SESSION 195 (SYMPOSIUM)

AGING WITH GRACE IN THE HEALTH AGING BODY AND COMPOSITION STUDY

Chair: C. Rosano, University of Pittsburgh, Pittsburgh, Pennsylvania
Discussant: A.B. Newman, University of Pittsburgh, Pittsburgh, Pennsylvania

While aging is a universal human condition that typically leads to cognitive and mobility limitations in older adults, some older adults nevertheless age more gracefully than others. The reasons for these differences in the aging processes have received much attention but they remain largely unexplained. Identifying predictors of aging well is an important public health objective, because of the rapidly increasing number of older adults who are at risk of mobility disability and dementia. This symposium will address these questions using data from the Health, Aging and Body Composition Study (Health ABC). The Health ABC is an ongoing longitudinal cohort study of 3075 medicare-eligible adults in Pittsburgh, PA & Memphis, TN (52% Women, 42% Black) who were 70-79 years old when the study began, in 1997-98. Baseline exclusions were difficulty walking $\frac{1}{4}$ mile, climbing 10 steps without rest, or performing basic ADL and using mobility aids. The participants of this symposium will apply markers of the neuro-muscular system and of vascular and brain integrity, as well as lifestyle measures, to identify older adults who maintain greater physical and cognitive function late in life.

BRAIN INTEGRITY AND GRACEFUL MOBILITY CONTROL IN COMMUNITY-DWELLING OLDER ADULTS

C. Rosano, H. Aizenstein, R. Boudreau, V. Venkatraman, A.B. Newman, University of Pittsburgh, Pittsburgh, Pennsylvania

Through the use of brain magnetic resonance imaging (MRI) techniques, we have discovered important markers of the central control of mobility in community-dwelling older adults. Here we discuss the contribution of brain integrity to physical performance in the context of other health-related factors which are known to be associated with slower gait and in particular we will address intriguing gender differences. Brain integrity is measured through advanced MRI methods that provide highly detailed information of brain volume, cellular integrity, connectivity and blood flow. Specifically, we focus on the integrity of five functional domains, each associated with gait: motor and balance control, visuospatial attention, cognitive processing speed, memory and motor imagery. Mathematical methods based on partial least squares regression method and novel computational paradigms will be discussed to identify and characterize interrelationships between the MRI measures of brain integrity and gait speed, while accounting for covariates.

ACTIVITY AND COGNITIVE PERFORMANCE: IS IT JUST FITNESS? INSIGHT FROM THE COGNITIVE VITALITY SUBSTUDY

E. Simonsick¹, K. Yaffe², M. Carlson³, A.B. Newman⁴, 1. National Institute on Aging, Baltimore, Maryland, 2. University of California, San Francisco, San Francisco, California, 3. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, 4. University of Pittsburgh, Pittsburgh, Pennsylvania

Numerous studies find activity participation supports maintained cognitive function; whether this observation simply reflects greater health and capacity for activity engagement has not been adequately tested. In 927 Health ABC CVS participants (50% women, 49% black, mean age 75.2), we found cardio-respiratory fitness positively associated with 3MS score, verbal memory and motor and perceptual speed ($p < .001$). Independent of fitness (and age, sex, race, site, and education), participation in mental activities was positively associated with 3MS score, verbal memory and perceptual speed ($p < .001$); whereas recreational activity was associated with motor speed ($p < .01$). After two years, baseline fitness remained important only for maintaining motor perform-

ance ($p < .01$), with mental activity important for maintaining 3MS score and perceptual speed ($p < .01$ for both). Findings indicate that although cardio-respiratory health may condition cognitive function, engagement in domain specific activities may be critical for maintained cognitive performance in generally well-functioning persons in their seventies.

GREATER CUMULATIVE FUNCTION IN BRAIN, PERIPHERAL NERVES AND MUSCLES IS ASSOCIATED WITH FASTER GAIT: THE HEALTH, AGING AND BODY COMPOSITION (HEALTH ABC) STUDY

E.S. Strotmeyer¹, A.B. Newman^{1,6}, T. Harris², S. Satterfield³, H. Atkinson⁴, K. Yaffe⁵, C. Rosano¹, 1. Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania, 2. National Institute on Aging, Bethesda, Maryland, 3. University of Tennessee, Memphis, Tennessee, 4. Wake Forest University, Winston-Salem, North Carolina, 5. University of California, San Francisco, San Francisco, California, 6. University of Pittsburgh, School of Medicine, Pittsburgh, Pennsylvania

Gait requires function of multiple physiological systems including the central and peripheral nervous system and the muscles. We investigated if a combination of these systems' function was more strongly related to gait than individual system function in older adults from Health ABC (N=1824). A variable was created using the Digit Symbol Substitution Test (central nervous system), peroneal motor nerve conduction amplitude (peripheral nervous system) and isokinetic quadriceps strength (muscle function): above median for none (severe impairment; 11%), 1 (moderate impairment; 35%), 2 (modest impairment; 39%) or all (minimal impairment; 15%). After multiple adjustments, participants with minimal impairment had 15% faster gait speed during a 20-m usual walk than those with severe impairment (1.21 ± 0.2 vs. 1.06 ± 0.18 m/s; $p < 0.001$). Results suggest that combinations of impairments in the brain, nerves and muscles are common in older adults and that their co-occurrence is more strongly associated with slower gait speed than impairment in one.

LOWER LEVELS OF SUBCLINICAL CARDIOVASCULAR DISEASE ARE ASSOCIATED WITH FASTER GAIT

N. Watson¹, A. Youk², K. Sutton-Tyrrell¹, R. Boudreau¹, E. Simonsick³, D.C. Bauer⁴, K.C. Johnson⁵, A.B. Newman¹, 1. Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. Biostatistics, University of Pittsburgh, Pittsburgh, Pennsylvania, 3. National Institute on Aging, Baltimore, Maryland, 4. University of California, San Francisco, California, 5. University of Tennessee, Memphis, Tennessee

Low ankle-arm index (AAI), a marker of peripheral arterial disease (PAD), predicts disability in older adults. Elevated pulse wave velocity (PWV), a measure of arterial stiffness, increases mortality risk. We used random coefficient models to compare the associations of PWV and AAI with physical function over eight years in 2,066 participants in the Health, Aging and Body Composition Study (mean age (SD) 73.6 (2.8) years, 48.1% men, 37.8% black). Rates of gait speed decline per year were similar across levels of subclinical vascular disease. However, lower PWV and higher AAI were each associated with faster gait speed (m/s) at baseline and throughout the study period: Beta=-0.008, $p=0.03$ for PWV (SD); Beta=0.022, $p < 0.01$ for AAI (SD) after adjustment for demographics, risk factors and comorbidities and exclusion of those with high AAI (> 1.4) (n=26) or noncompressible arteries (n=40). Lower levels of subclinical cardiovascular disease were associated with faster gait in this cohort.

FATIGUE

FATIGUE IN DAILY ACTIVITIES: A NEW MEASURE OF FATIGABILITY FOR OLDER ADULTS

S.L. Murphy^{1,2}, D.M. Smith², 1. *Physical Medicine and Rehabilitation, University of Michigan, Ann Arbor, Michigan*, 2. *VA Ann Arbor Health System GRECC, Ann Arbor, Michigan*

Fatigue is a common problem among older adults and is associated with poor physical function and increased mortality. Unfortunately, measurement of fatigue is problematic because it is multifaceted and may reflect either a subjective experience or performance deficit. Recent initiatives at the National Institute on Aging have attempted to clarify how fatigue can be understood through the concept of "fatigability," the relationship between fatigue and activity performance. The purpose of this paper is to present a new methodology for measuring fatigability in older adults. Sixty female participants [40 with symptomatic knee or hip osteoarthritis (OA) and 20 age-matched controls] wore an enhanced wrist-worn accelerometer that measured physical activity continuously and inputted fatigue levels at several points in a day over the 5 day home period. Fatigability was operationalized as a fatigue increase during a specified time interval after a 'high' activity bout (individually calculated for each participant). Controlling for baseline fatigue, fatigability among OA participants was associated with OA severity, worse vitality scores on the SF-36, and increased body mass index. The results support the preliminary validity of this type of field-based measurement. Future directions for measurement will be discussed.

ORAL HEALTH AND FATIGUE IN OLDER ADULTS

K. Avlund¹, P. Holm-Pedersen², 1. *University of Copenhagen, Copenhagen K, Denmark*, 2. *Copenhagen Gerontological Oral Health Research Center, University of Copenhagen, Copenhagen, Denmark*

Purpose: To analyse whether tooth loss at age 70 is associated with fatigue cross-sectionally at age 70 and with onset of fatigue at 5-, 10-, and 15-year follow-up. Methods: A baseline study of a random sample of 70-year old people born in 1914 and follow-up 5, 10 and 15 years later. A total of 573 nondisabled individuals participated in the study of 70-year-olds in 1984. Oral health was measured according to number of teeth (0, 1-9, 10-19, ≥ 20). Fatigue was measured by the Avlund Mob-T scale on tiredness after performing six mobility activities. Covariates, all measured at baseline, were sex, education, income, comorbidity, and smoking. Results: Bivariate logistic regression analyses showed significant associations between number of teeth at age 70 and fatigue both cross-sectionally (OR=1.96, 95% CI=1.24-3.10) and longitudinally as onset of fatigue at 5-year follow-up (OR=2.47, 95% CI=1.45-4.23) and 10-year follow-up (OR=2.21, 95% CI=1.18-4.14) but not at 15-year follow-up. The associations between having no teeth and fatigue were attenuated by the covariates, but the associations remained marginally significant in most analyses, whereas the odds ratio at 10-year follow-up for onset of fatigue by having 1-9 teeth compared to persons with more than 20 teeth remained strong and statistically significant in all analyses (OR=2.93, 95% CI=1.23-7.02 in the final model). Conclusion: Tooth loss is independently associated with onset of fatigue in old age. The findings indicate that tooth loss may be an early indicator accelerated aging.

TIRED TO DEATH?: FATIGUE IN THE OLDER ADULT POPULATION

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Fatigue is prevalent among older adults and predicts disability and mortality. Yet, research is lacking on the epidemiology of fatigue in older age subgroups (young-old vs. oldest-old) and on its possible confounding with depression. We hypothesized that fatigue predicts mortality across the older adult age range and that fatigue is distinct from depression in its outcomes. We analyzed waves 2000-2006 of the Health and Retirement Study, a nationally-representative longitudinal health interview survey. Our study sample included community-dwelling adults ≥ 65 years ($n=10,121$, representing 32.1 million) in 2000. Respondents were asked whether they had severe fatigue/exhaustion as a persistent/troublesome problem in the previous two years. Six-year mortality was determined using HRS data cross-referenced with the National Death Index. Covariates included six demographic characteristics, seven chronic diseases, and indicators of depression. We used Cox proportional hazards models and performed Kaplan-Meier survival analyses. 19.3% of respondents ($n=1,963$, representing 6.2 million) reported fatigue at baseline. Their six-year mortality rate was 40.9%. The association between fatigue and mortality (unadjusted hazard ratio [HR]=2.0, $p<0.0001$) persisted after adjusting for sociodemographic and disease covariates (HR=1.4, $p<0.0001$). Fatigue was associated with mortality across older age subgroups: 65-74: HR=1.5, $p<0.0001$; 75-84: HR=1.4, $p<0.0001$; ≥ 85 : HR=1.4, $p=0.001$. The association of fatigue with mortality persisted in analyses adjusting for self-reported depression, psychiatric problems, and Center for Epidemiologic Studies Depression Scale items. Older adults across the age spectrum who report fatigue have increased mortality. The pathophysiology of fatigue in this population remains incompletely elucidated and not fully explained by disease burden or depression.

PAIN, FATIGUE, AND SLEEP DISRUPTIONS IN OLDER ADULTS WITH OSTEOARTHRITIS

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Pain, fatigue, and sleep disruptions are common symptoms in adults with cancer and fibromyalgia. Little is known about how these symptoms interact in elders with osteoarthritis (OA), one of the most common chronic conditions in older adults. Thus, the purpose of this study was to investigate, in a sample of elders with OA, (a) the prevalence of self-reported symptoms of pain, fatigue, and sleep disruption, (b) whether these symptoms represent a symptom cluster, and (c) the relationship between these symptoms and cognitive, functional and emotional status. The sample consisted of 79 community-residing adults (mean age = 83 years; 75% female). Participants completed a comprehensive interview to assess self-reported pain (pain presence and intensity; 0-10 NRS), sleep disruption and fatigue (Symptom Checklist), functional status (Barthel Index), cognition (MMSE, Dementia-Rating Scale, and HVLT), and mood (Geriatric Depression Scale). Results indicated that 91% of participants experienced daily pain of moderate intensity (Mean = 4), 61% reported fatigue during the day, 39% reported difficulty falling asleep, and 53% reported waking at night. Pain, sleep disruptions, and fatigue formed a common symptom factor (all factor loadings $> .70$), and factor scores were significantly associated with cognitive functioning (composite of 3 cognition measures) ($r = -.30$) and depression ($r = .48$), but not with functional status. These findings indicate that pain, sleep disruption, and fatigue are common, inter-related symptoms in older adults with OA that are associated with more depression and

lower cognition. Discussion will focus on methodological issues in measuring symptoms and their impact.

SESSION 205 (PAPER)

HEART FAILURE

COGNITIVE IMPAIRMENT AND SELF-CARE IN PATIENTS WITH HEART FAILURE

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As many as half of hospital readmissions among patients with heart failure (HF) are potentially preventable with improved self-care practices. However, many patients with HF are cognitively impaired and self-care activities may be more difficult in the setting of cognitive impairment (CI). In a sample that will include more than 100 patients >65 years enrolled in a Heart Failure Wellness Clinic, we are examining the prevalence of CI and the association of CI to three domains of HF self-care: prevention (e.g., diet, medication adherence); symptom monitoring (e.g., weight gain); and management of symptoms (e.g., care seeking behavior). Data on medical history, self-care practices, depression and cognitive function were obtained during a telephone interview. In preliminary data from 40 patients with chronic HF, 30% were impaired in global cognitive function, 65% in verbal fluency and 75% in executive function. Compared to participants who were not impaired, those with impaired global function were, on average, older (67 vs 71 years), were more often male (73% vs 62%) and were more likely to be depressed (19% vs 36%) and to receive assistance with self-care activities (19% vs 73%). Impaired patients also had poorer average performance (measured on a 5-point scale) in all domains of self-care: prevention (2.0 vs. 1.7), symptom monitoring (1.9 vs. 1.7), and management of symptoms (1.8 vs. 1.5). CI represents an important, yet underappreciated, condition in patients with HF, the understanding of which will inform the development of interventions to improve self-care practices that are tailored to patient's cognitive status.

MULTICOMPONENT HOME CARE INTERVENTION FOR HEART FAILURE PATIENTS: AN ACADEMIC CLINICAL PARTNERSHIP

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Background- Heart Failure (HF) has clinically significant psychological and physical consequences for older persons, and hospitalization for HF is frequent and costly to the Medicare program. As HF is the most common primary Medicare home care diagnosis, there is a critical need to develop home care services that improve health-related outcomes for this population. **Objectives-** The primary aim of this pilot study was to test the feasibility and preliminary efficacy of a nurse-directed home care intervention for Medicare HF patients. **Observed outcomes** were 90-day hospitalization, depressive symptoms, and quality of life (QOL). **Methods-** 24 patients with a primary diagnosis of HF were assigned to the intervention (n = 12) or control group (n = 12) according to geographical location in a large multi-branch Medicare-certified home health agency. Intervention group patients received 8 structured nurse education visits using evidence-based protocols designed in previous trials to teach HF self-management and to prevent/reduce depression, and a telemonitoring system. Control group patients received usual care and telemonitoring. QOL was assessed using the Minnesota Living with Heart Failure questionnaire and depressive symptoms were assessed with Patient Health Questionnaire-9 at baseline and 90 day study endpoint. **Results-** The intervention group demonstrated significantly reduced depressive symptoms and significantly

improved QOL (both p = .05). There was a trend toward lower hospital readmission rates in the intervention group (16% vs. 25%) but this was not statistically significant. **Implications-** A nurse-directed home care intervention can improve QOL, reduce depression and holds promise in reducing hospital readmissions.

PHYSICAL PERFORMANCE MEASURES AND LONG TERM PROGNOSIS IN OLDER HEART FAILURE PATIENTS

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Aim. To evaluate whether physical performance, assessed with the Short Physical Performance Battery (SPPB), predicts long-term prognosis of older subjects hospitalized for heart failure (HF). **Methods.** Subjects aged 65+ years were enrolled on discharge from hospital, after admission for decompensated HF. Participants underwent echocardiography, comprehensive geriatric assessment, and SPPB. Cox proportional hazards regression models were used to predict survival over a 30-month follow-up. **Results:** Of 157 participants (mean age 80 years, range 65-101; 50% men), 61 died. Mortality rate increased with worsening physical performance: compared with an SPPB score of 9+, scores of 0, 1-4, and 5-8 were associated with hazards of death of 6.06 (95% CI 2.19-16.76), 4.78 (1.63-14.02) and 1.95 (0.67-5.70), respectively, adjusted for demographics, ejection fraction, New York Heart Association classification, comorbidity, and other covariates. **Conclusion.** SPPB is an independent predictor of long-term survival of older subjects who leave the hospital after an episode of decompensated HF.

HEART FAILURE AND INCIDENT DRIVING CESSATION AMONG COMMUNITY-DWELLING OLDER ADULTS: FINDINGS FROM A PROSPECTIVE POPULATION-BASED STUDY

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Background: Heart failure and driving cessation are common among older adults and associated with poor outcomes. However, the association between heart failure and incident driving cessation has not been previously reported. We studied the effect of baseline heart failure on incident driving cessation among community-dwelling older adults in the Cardiovascular Health Study (CHS). **Methods:** Of the 5795 CHS participants in the public-use copy of the database, data on driving at year 10 was available for 2780 subjects, of whom 2743 reported driving at baseline. Heart failure was centrally adjudicated at baseline. Logistic regression models were used to determine the association of heart failure with incident driving cessation at year 10 of the study. **Results:** Patients had a mean (\pm SD) age of 72 (\pm 4) years, 1540 (56.1%) were women, 394 (14.4%) were African Americans and 66 (2.4%) had baseline heart failure. Overall, 464 (16.9%) reported incident driving cessation. At the 10 year follow-up, 33.3% and 16.5% of participants with and without baseline heart failure were not driving (unadjusted odds ratio, 2.53; 95% confidence interval, 1.50-4.26; P<0.0001), respectively. This association remained significant after multivariable adjustment for age, gender, race, marital status, living alone, education, income, social support, depression, general health, vision problems, drivable vision, and common geriatric comorbidities at baseline (adjusted odds ratio, 2.05; 95% confidence interval, 1.13-3.73; P=0.018). **Conclusions:** Among community-dwelling older adults, baseline heart failure was associated with incident driving cessation. Further studies are needed to identify risk factors and implications of driving cessation in heart failure patients.

HOW TO DESIGN AN EFFECTIVE DISEASE MANAGEMENT PROGRAM FOR OLDER HEART FAILURE PATIENTS? A META-REGRESSION

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Background: Disease management program (DMP) have evolved to enhance discharge outcomes in older patients with heart failure (HF). Yet, randomized controlled trials (RCTs) examining their effectiveness report inconsistent findings, possibly due to variations in DMP design. **Aim:** A meta-analysis and meta-regression was conducted to identify the DMP characteristics which associated with a lower hospital readmission and mortality in older HF patients. **Methods:** We searched medical databases and a trials registry up to Sept (Week 1) 2007. Two reviewers independently selected the studies, extracted data and assessed study quality. Pooled relative risk (RR) estimates were calculated with random-effect models. Subgroup analysis and meta-regression analysis was conducted to identify the program characteristics which predicted hospital readmission and mortality. **Results:** The meta-analysis included 28 RCTs. The DMPs significantly reduced all-cause (RR=0.82; 95% CI 0.72-0.94) and cardiac-cause (RR=0.56; 95% CI 0.44-0.73) hospital readmissions and caused a trend towards lower mortality (RR=0.89; 95% CI 0.78-1.01). Subgroup analysis indicated that DMP team structure, care components, and follow-up method were associated with to the program outcomes. Multivariable meta-regression identified that DMPs run by a multi-disciplinary team or led by a cardiac nurse specialist was associated with a 32-37% reduction in risk of hospital readmission. The incorporation of drug titration as a care component to such team structure also associated with a 55-57% reduction in mortality risk. **Conclusion:** Comprehensive DMPs which involves a multi-disciplinary team or cardiac nurse and incorporates drug titration are most effective to improve the health outcomes of older patients with heart failure.

SESSION 210 (POSTER)

PHYSICAL ACTIVITY - HS POSTER SESSION

PHYSICAL ACTIVITY ASSESSMENT FOR INDIVIDUALS WITH EARLY ALZHEIMER'S DISEASE

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Interest in the physical activity habits of those with Alzheimer's disease has made a valid survey tool necessary. We examined the validity of the Physical Activity Scale for the Elderly (PASE), a brief survey specifically developed for older adults, as compared to other measures of activity and function. Additionally, the self-rated PASE score was compared to that of an informant familiar with the participant's daily activity to examine validity of self-reporting by those with dementia. The PASE was sensitive to reduced physical activity by those with AD. We additionally found that the participant's report was generally similar to that of the informant. However, for those with early AD, the informant rating was more closely associated with objective physical measures. We conclude that PASE is a valid survey of physical activity for those in the early stages of AD and may be most accurate when administered to an informant on behalf of an individual with dementia.

TURN THAT FROWN UPSIDE DOWN: ASSOCIATIONS BETWEEN MOOD AND FUNCTIONAL FITNESS AMONG OLDER WOMEN

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The association between fitness and mood has shown to be positive among general populations. More specifically, as physical fitness

improves, positive mood will more likely be present. Despite advances in understanding the benefits of exercise with older adults, research utilizing the Visual Analog Mood Scales (VAMS) to understand this relationship is stagnant. The purpose of this preliminary study was to investigate the relationship between mood states and functional fitness among senior women (M = 82.56, SD = 6.94). Participants (n = 58) completed the VAMS, Senior Fitness Test (chair stand, 8 ft up-and-go, arm curl, 6-minute walk, back scratch, sit-and-reach), and hand-grip strength tests. Pearson's product moment correlation coefficients were used to examine the relationship in question. Results indicated that the strongest correlation (fair to moderate) was observed between tired and the chair stand test ($r = -0.476$, $p = .00$), followed by tired and the arm curl test ($r = -0.456$, $p = .00$). Tense and the sit-and-reach test also revealed a fair to moderate correlation ($r = -0.426$, $p = .01$). These findings show that as poorer functional scores were recorded, greater negative mood states were present. Clearly, sedentary lifestyles may lead to declines in mood state, ultimately leading to poor quality of life. Therefore, exercise to promote life-long physical and mental health is vital. Future research should include longitudinal studies to observe changes over time. Assessing mood states with the VAMS for consistency in the literature is also suggested.

A SPORTING CHANCE: EFFECTS OF ACTIVE VIDEO GAMES ON SENIOR ADULT FITNESS AND ACTIVITY LEVELS

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Active video games as a means of physical activity have caught the attention of senior adults across America. However, the effects of active video games on physical fitness and activity levels in older populations are unclear. The aim of this investigation was to examine the effects of an intervention utilizing Wii™ Sports on senior adult fitness and activity levels. Eight senior (80.88 ± 5.33 years), community-dwelling adults recruited from a retirement center participated in 30 minute activity sessions twice a week for 6 weeks utilizing Wii™ Sports (bowling, golf, baseball, boxing and tennis). Pre and post functional performance measures (aerobic endurance, agility/dynamic balance, flexibility and strength) were evaluated via the Senior Fitness Test. Participants also completed the CHAMPS and PASE physical activity questionnaires before and after the intervention. Differences between pre and post measurements were analyzed using the nonparametric Wilcoxon signed-rank test. Shoulder flexibility measured by the back scratch test improved significantly after six weeks of Wii™ Sports participation (pre-mean: -7.38, post-mean: -4.69; $p = 0.012$). No significant differences ($p > .05$) in the other Senior Fitness Test measures or physical activity questionnaire scores were found. Findings can potentially be used to create senior adult activity programs incorporating active video games that may help increase fitness levels. However, future studies are needed to support and expand on the present findings.

WII-FIT FOR BALANCE AND GAIT IN SKILLED NURSING FACILITY: A RETROSPECTIVE STUDY

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Background: Falls in elderly are a major public health problem. Poor balance and gait abnormalities are risk factors for falls. Exercise improves gait and balance in elderly. However, it is difficult to engage patients in exercise programs. Wii-Fit might bridge this gap by providing high level of engagement at an affordable price. Wii-Fit is a Nintendo game used for balance, yoga, aerobics, and strength training. It is a TV based self-directed activity. Virtual trainers talk the user through the activity and track progress while visual and auditory feedback improve engagement. Anecdotal reports suggest improvement in bal-

ance and social benefits with Wii-Fit, but no systematic studies are available. Objective: To compare the effect of Wii-Fit augmentation to physical therapy alone in subjects undergoing rehabilitation in skilled nursing facility (SNF) using a retrospective chart review. Methods: 100 charts were reviewed of which seventeen patients were noted to have used Wii-Fit during their rehabilitation. These subjects were matched with seventeen controls who did physical therapy alone. Results: There were no baseline differences between the groups. The mean age was 77.7 years, with 11 females in each group. All the subjects were Caucasians. The average length of stay was 30 days in each group. Mean duration of the Wii-Fit use was 4-weeks. Wii-Fit augmentation group improved significantly in Activities of Daily Living ($p=0.008$), balance ($p=0.0001$), and assistance with gait ($p=0.05$) when compared to the control group. Conclusion: Wii-Fit can be used safely in a SNF, and it may improve balance, gait, and functional status.

RELATIONSHIP BETWEEN STEM CELL NUMBER AND PHYSICAL ACTIVITY IN OLDER ADULTS

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Purpose: The purpose of this pilot study was to evaluate the relationship between stem cell number and physical activity during aging. Methods: Our sample consisted of 39 community dwelling older adults (median age 70 years). At the first assessment, physical activity was assessed with a self-report questionnaire, the Human Activity Profile (HAP). Subjects were instructed to wear pedometers and accelerometers during waking hours for 1 week to measure physical activity. Blood was collected at the end of this time period and analyzed for side population (SP) and progenitor stem cells and IL-6. Results: The results show an inverse relationship between circulating stem cell number and physical activity. The correlation between SP cells and pedometer steps during the week prior was $r = -0.4$ ($p=0.05$), and the day prior was $r = -0.42$ ($p=0.03$). The correlation between SP cells and HAP-Adjusted Activity Score (AAS) was $r = -0.48$ ($p=0.01$). A similar relationship was seen with endothelial progenitor cells. The correlation with HAP-AAS was $r = -0.56$ ($p=0.02$) and the correlation with accelerometer counts was $r = -0.56$ ($p=0.03$). Although no correlation was found between IL-6 and the stem cells, there was a statistically significant negative correlation between IL-6 and all measures of physical activity. Conclusion: Subjects who were more physically active had lower levels of circulating stem cells. This finding is inconsistent with the acute effects of exercise on stem cells. Further studies may determine if this represents a physiologic adaption to physical activity.

DEMOGRAPHIC CORRELATES OF PHYSICAL ACTIVITY AMONG COMMUNITY-DWELLING OLDER ADULTS

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Background: Physical activity is associated with better outcomes in community-dwelling older adults. However, demographic correlates of physical activity in older adults have not been well studied. We studied demographic correlates of physical activity in community-dwelling older adults, using the public-use copy of the Cardiovascular Health Study (CHS). Methods: Data on kilocalories of energy expended per week in leisure-time physical activity were collected at baseline were available from 5775 CHS participants. We used student's t and Mann-Whitney tests to compare mean kilocalories of energy expended per week by various demographic subgroups. Results: Patients had a mean (\pm SD) age of 73 (± 6) years, 34% were 75 years and older, 58% were women, 16% were African Americans, 66% married, and 36% had 12 grade or higher education. Mean of energy expended per week was 1707 (± 2028) kilocalories. Mean of energy expended per week was significantly

higher among participants who were younger than 75 years (1878 versus 1377 for ≥ 75 years), men (1921 versus 1549 for women), whites (1832 versus 1026 for African Americans), married (1874 versus 1383 for unmarried), not living alone (1767 versus 1297 for living alone), college education or higher (1813 versus 1628 for lower education) and annual income \$25,00 or higher (1879 versus 1611 for lower income). All p values were <0.05 . Conclusions: Among community-dwelling older adults, a number of baseline patient characteristics correlated with kilocalories of energy expended per week, which may help identify candidates for targeted intervention to improve physical activity.

DEVELOPMENT OF CARE SYSTEM TO ACTIVATE FRAIL OLDER ADULTS' ACTIVITIES IN DAILY LIFE (NO2): EFFECTIVENESS OF WALKING EXERCISE BY SYNTHETIC TECHNIQUES OF CHROMA-KEY

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Introduction: Learning materials of walking exercise by audio visual system such as video tape, DVD, or internet is currently used among large number of older adults. However, learners can not be evaluated if they follow the model of exercise in screen correctly. Purpose: The purpose of this research was to investigate the effectiveness of audio visual system by synthetic techniques of Chroma-key as learning material of walking exercise for older adults. Methods: Two types of learning materials were provided to older adults as examinees who are living in the suburb of A prefecture in Japan for a trial. One type of learning materials was the video tape that the instructor was a model of exercise in screen and the learners watched the screen and followed the instructor. Another type of learning material was that pictures of learners were synthesized into the pictures of the instructor on the screen in real-time. After these trials, learners were asked about their impression by researchers in questionnaires and interviewed regarding these two types of learning materials. Results: Most learners stated that the latter method was effective not only could they evaluate their exercise in real-time but also they could experience virtually that the instructor was near them and they were in the same time and space. Cognitive difference among learners was also identified: they felt reality in bigger size using synthetic picture.

THE ASSOCIATION BETWEEN MIDLIFE PHYSICAL ACTIVITY AND DEPRESSIVE SYMPTOMS IN LATE LIFE: AGE GENE/ENVIRONMENT SUSCEPTIBILITY - REYKJAVIK STUDY

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Background: Physical activity (PA) decreases risk of various health outcomes, but the long term impact of mid-life PA on depression in late-life has not been studied. Purpose: To examine the association between mid-life PA and late-life depression. Methods: A population-based cohort from the Age Gene/Environment Susceptibility - Reykjavik Study followed since 1967 as a part of the Reykjavik Study. Main outcome measures were greater depressive symptoms assessed by continuous GDS score (Geriatric Depression Scale, 15-item) or by threshold value of ≥ 6 in late life. Results: Data were available for 4902 participants (2158 men and 2744 women) (antidepressant users ($n=862$) excluded). Level of weekly PA (none, $n = 3424$; ≤ 5 hrs, $n = 1252$; and > 5 hrs, $n = 226$) was ascertained by questionnaire at mid-life (mean age=52 years).

Depressive symptoms were assessed an average of 26 years later. Compared to those who never exercised at midlife, after controlling for demographic and health risk factors, both active groups had significantly lower GDS score (≤ 5 hrs; $\beta = -0.17$, Confidence Interval (CI) $-0.29, -0.04$, $P < 0.01$, > 5 hrs; $\beta = -0.29$; CI $-0.55, -0.03$, $P < 0.05$) than the sedentary group. No relationship was seen using a threshold value of 6 for the GDS. Conclusion: Our study suggests that mid-life PA is associated with reduced depressive symptoms 26 years later. PA in midlife may contribute to maintenance of mental health and may reduce or delay the risk of developing depression in late life.

SESSION 215 (SYMPOSIUM)

PSYCHOTROPIC DRUG USE IN THE FRAIL NH ELDERLY: ISSUES AND CHALLENGES

Chair: J.A. Lucas, IHHPAR, Rutgers University, New Brunswick, New Jersey

Discussant: S. Crystal, IHHPAR, Rutgers University, New Brunswick, New Jersey

High rates of psychotropic drug use among the elderly raise important concerns. Vulnerability to side effects is substantial, due to aging-related pharmacodynamic and pharmacokinetic changes. Polypharmacy and complex patterns of medical and psychiatric comorbidity increase the risk of adverse reactions and drug interactions. Exclusion of older adults from many clinical trials means effectiveness and adverse effects are often poorly understood. In the nursing home setting, there is under-recognition and treatment for conditions such as depression, and inequities in access to antidepressant drugs. Antipsychotic medication (APM) rates may be different among minority groups and in resource dependent facilities with more minority residents, potentially increasing the mortality risk among these vulnerable subgroups. The extent and appropriateness of use of APMs among nursing home residents is also concerning. Use of APMs for behavioral symptoms of dementia raises particular safety and appropriateness concerns, in light of greater mortality and adverse event risks. Balancing benefits and risks poses an ongoing challenge. Access to therapies may also be adversely impacted by policy changes, such as NH prescribing guidelines restricting use and requiring dose reductions for psychoactive medications. Conversely, state regulatory policies, such as citing deficiencies for unnecessary drugs, Medicaid reimbursement rates, and staffing requirements, vary and may impact APM use through their overall effect on facility treatment patterns. Clinical and policy issues in treatment of the elderly with mental health conditions will be illustrated through these relevant studies.

ANTIPSYCHOTIC MEDICATION (APM) USE AMONG NH RESIDENTS: APPROPRIATE OR INAPPROPRIATE?

J.A. Lucas¹, J. Bowblis², T. Gerhard¹, S. Chakravarty¹, S. Crystal¹, 1. IHHPAR, Rutgers University, New Brunswick, New Jersey, 2. Miami University, Oxford, Ohio

Using clinical and facility indicators from 2003- 2004 MDS data merged with Medicaid drug and OSCAR data, we examined extent and appropriateness of APM among NH residents and associated resident and facility characteristics in a study sample of 65+ NH Medicaid residents ($N=224,338$) from 5 states. Using CMS guidelines, APM use was categorized as appropriate, potentially appropriate (dementia), and inappropriate. Multivariate logistic regression analysis predicted inappropriate APM use based on resident and facility characteristics. Of 18.4% residents using APMs, 39.0% were appropriate, 10.2% potentially appropriate, while 50.8% had no appropriate indication. Controlling for resident demographics and clinical characteristics, odds of inappropriate APM increased with size (OR=1.10; 95% CI=1.06-1.13) and higher proportion of Medicaid funding (OR=1.44; 95% CI=1.39-1.48); odds decreased for non-profits (OR=0.91; 95% CI=0.87-0.94), and with higher RN (OR=0.86; 95% CI=0.83-0.88) and CNA (OR=0.68; 95%

CI=0.66-0.70) staffing. APMs are commonly prescribed lacking CMS appropriate indications. Facility structure and resources are associated with inappropriate APM use.

THE IMPACT OF STATE REGULATION ON THE RATE OF ANTIPSYCHOTIC DRUG USE IN NURSING HOMES

J. Bowblis¹, S. Crystal², O. Intrator³, J.A. Lucas², 1. Economics, Miami University, Oxford, Ohio, 2. Rutgers University, New Brunswick, New Jersey, 3. Brown University, Providence, Rhode Island

This research studies the variation in antipsychotic use by nursing homes (NHs) and assesses the impact of state policies on this variation using a retrospective observational design. The sample is a panel of 14,743 non-hospital NHs from 1999 to 2005. Data is obtained from the Online Survey and Certification Reporting System (OSCAR) and linked with state policy variables. Antipsychotic use steadily increased from 19.9% to 27.3% of all residents. There is significant variation in the rate of use by region and state policies. States that cite more drug-specific deficiencies or provide more generous Medicaid reimbursement have subsequent lower AP use rates while direct care staffing requirements did not have an effect. This study provides insight into how state policies such as survey deficiencies and reimbursement explain variation in AP use, and how states might influence treatment patterns through these policies.

TRENDS IN DIAGNOSIS AND TREATMENT OF DEPRESSION IN ELDERLY LONG TERM CARE NURSING HOME RESIDENTS

D. Gaboda, J.A. Lucas, M.J. Siegel, E. Kalay, S. Crystal, Rutgers University, New Brunswick, New Jersey

We examined cross-sectional changes in identification and treatment of depression among 65+ NH residents in 8 states ($N=2,804,289$), using clinical and facility indicators from 1999-2006 merged MDS and OSCAR data. Multivariate logistic regression described the effect of resident and facility characteristics on the probability of being diagnosed with depression and, for those who received a diagnosis, on the probability of receiving any treatment. The percentage of all residents diagnosed with depression increased steadily, from 33.8% to 50.6%; and, among those diagnosed, treatment with antidepressant medication increased from 71.2% to 83.1%. Non-Hispanic Black residents were consistently diagnosed at lower rates than both non-Hispanic Whites and Hispanics and were least likely to receive an antidepressant in all years. In 2006, non-Hispanic Black residents were less likely to be diagnosed than non-Hispanic Whites (OR=0.49; 95% CI=0.47-0.50) and also less likely to receive any treatment (OR=0.71; 95% CI=0.68-0.74), after controlling for other characteristics.

ANTIPSYCHOTIC USE IN NURSING HOMES: DIFFERENCES BY RACE AND ETHNICITY

M.J. Siegel, J.A. Lucas, E. Kalay, S. Crystal, Institute of Health, Rutgers University, New Brunswick, New Jersey

Antipsychotic drug use in nursing homes (NH) has become widespread, particularly for treating neuropsychiatric and behavioral symptoms of dementia. However, these drugs may increase the risk of death among frail elderly patients. This study examines the effects of resident race/ethnicity and facility racial/ethnic composition on antipsychotic use among NH residents, using 2006 individual-level data from the Minimum Data Set merged with facility-level data from OSCAR for NH residents in 8 states. Among residents with dementia, 31.2% of whites, 29.9% of blacks, and 36.8% of Hispanics used antipsychotics ($p<.0001$). Logistic regression results indicate black race was associated with lower odds of antipsychotic use (OR=.884, CI .852-.918); Hispanic ethnicity was associated with greater odds of use (OR=1.126, CI 1.075-1.180). Residing in a facility with a higher proportion of black (OR=1.166, CI 1.039-1.308) or Hispanic (OR=1.690, CI 1.469-1.945)

residents was associated with higher odds of antipsychotic use. These facilities may have fewer resources.

USE OF ATYPICAL ANTIPSYCHOTIC MEDICATIONS AMONG NURSING HOME RESIDENTS WITHOUT PSYCHOSIS: CHALLENGES FOR LONG-TERM CARE STAKEHOLDERS

S. Crystal, J.A. Lucas, T. Gerhard, E. Kalay, *Rutgers, The State University of New Jersey, New Brunswick, New Jersey*

Increased use of atypical antipsychotic medications (AAP) in the frail elderly has raised a range of policy challenges for payers, patients and clinicians. Balancing risks and benefits is challenging. In the nursing home (NH) population, widespread AAP use to manage behavioral problems associated with dementia has been controversial in recent years as new safety evidence has accrued. The Minimum Data Set for 1999 and 2006 was used to calculate prevalent antipsychotic use rates among NH residents age 65+ across hierarchical diagnostic subgroups. Compared to 1999, AP use among long-term residents with a full, non-admission MDS assessment increased from 20.2% to 27.6%, despite new, significant safety concerns about the use of antipsychotics for treatment of behavioral symptoms of dementia. Among residents with dementia and non-aggressive behavioral symptoms, treatment prevalence was almost 40%. Even after modest declines following FDA black box warnings in 2005, use remained above levels of the early 2000s.

SESSION 220 (SYMPOSIUM)

THE BERLIN AGING STUDY

Chair: *E. Steinhagen-Thiessen, Charité University Medicine Berlin, Berlin, Berlin, Germany*

Discussant: *J. Smith, University of Michigan, Ann Arbor, Michigan*

In this symposium we will present data from BASE-I and the design and research goals of BASE-II in comparison and in contrast to BASE-I. BASE-I: The multidisciplinary Berlin Aging Study I has been terminated recently. The study focussed on the very old (70-105 years). Participants were stratified by age and sex. A core sample of 516 out of 2000 total elderly Berlin citizens were closely examined in 14 sessions. We examined their mental and physical health, their psychological functioning and their social and economic situation. Since 1990 the study has been continued as a longitudinal study and the surviving participants have been reexamined seven times over a mean follow-up of 18 years. Meanwhile the Berlin population has changed (opening of the Berlin wall, unification of Germany, less single households etc.). Also, aspects of health, social-economic conditions and diseases in the aging population of Berlin changed, leading to initiating the Berlin Aging Study II. BASE-II: A total of 2200 Berlin citizens have been recruited for BASE-II, 50% of which are 20-30 years of age and the other 50% 60 years and older. These participants are the basis for long-term follow-up. Besides focussing on prevalent diseases, psycho-social aspects and economic conditions, we have special interest in evaluating predictors for disease development, functional loss during aging and the aging process as a systemic phenomenon. Both studies have a broadly based multidisciplinary approach. Therefore BASE-II will again be executed in collaboration between Max-Planck-Institute for Human Development and the Charité University Medicine Berlin Research Group on Geriatrics.

18-YEARS-LASTING LONGITUDINAL FOLLOW-UP OF THE PARTICIPANTS OF THE BERLIN AGING STUDY I (BASE-I)

V. Moskiou, H.K. Berthold, E. Steinhagen-Thiessen, *Research Group on Geriatrics, Charité University Medicine Berlin, Berlin, Germany*

As age simultaneously constitutes a biological, psychological, social and institutional phenomenon, the core sample of the Berlin Aging Study I, representatively selected and stratified by age and gender, has been

monitored for up to 18 years with a broad range of interdisciplinarity (internal medicine, geriatrics, psychiatry, psychology, sociology, social policy) regarding its long-term survival and mortality characteristics. Since 1990 seven follow-ups of the participants have been completed (1993-1994, 1995-1996, 1997-1998, 2000, 2004, 2005, 2008) focusing both on the present situation of young-old and oldest-old individuals as well as on the correlates and determinants of the aging process. During the period May – December 2008 22 survivors, aged 86-102 years, were thoroughly examined at their place of residence spending 6-11 sessions. Special emphasis was laid on objective and subjective physical and mental health, risk profiles, reference values (blood-sampling, functional diagnosis), medication, functional capacity and everyday competence.

LATE-LIFE DECLINE IN WELL-BEING: REPLICATING AND EXTENDING EVIDENCE FROM THE BERLIN AGING STUDY USING NATIONAL SURVEYS FROM GERMANY, THE UK, AND THE US

D. Gerstorf^{1,2,3}, N. Ram^{1,2,3}, J. Schupp³, U. Lindenberg², G.G. Wagner^{3,2}, *1. Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania, 2. Max Planck Institute for Human Development, Berlin, Germany, 3. German Institute for Economic Research, Berlin, Germany*

Throughout adulthood and old age, levels of well-being remain relatively stable. However, initial evidence from old and very old adults in the Berlin Aging Study suggests that late in life well-being declines considerably. Using long-term longitudinal data of deceased participants in national samples from Germany, the UK, and the US, we examine how long this miserable period lasts. In all three nations and across the entire adult age range, well-being was relatively stable over age, but declined rapidly with impending death. We identified prototypical transition points in each study between three and five years prior to death, after which normative rates of decline steepened by a factor of three or more. These across-nation analyses replicate and generalize initial evidence that rapid end-of-life declines in well-being and psychological health may indeed be a normative experience, and thus illustrate how large national surveys can complement and extend findings from intensive assessment studies.

THE BERLIN AGING STUDY II (BASE-II)—PHYSICAL AND MENTAL HEALTH ACROSS THE LIFESPAN

H.K. Berthold¹, V. Moskiou¹, G.G. Wagner³, U. Lindenberg², E. Steinhagen-Thiessen¹, *1. Research Group on Geriatrics, Charité University Medicine Berlin, Berlin, Germany, 2. Max Planck Institute for Human Development, Berlin, Germany, 3. The German Socio-Economic Panel Study (SOEP), Berlin, Germany*

A total of 2200 subjects have been recruited from the Berlin population (20-30 years or 60 years and older). Cross-sectional evaluation of medical, psychological, and socio-economic aspects will be concluded in 2010. There will be longitudinal follow-up of the cohort. Medical items include medical history, physical exam and laboratory analyses including a whole genome screening. Further examinations focus on cardiovascular and cardio-metabolic risks, nutrition, body composition, bone metabolism and bone density, degenerative diseases of the central nervous system, depression and anxiety disorders, musculoskeletal diseases, motion and mobility analyses, eye and hearing exams, quality of life, sex life questionnaire, and drug therapy. Furthermore, standard geriatric assessment scales will be documented. The primary goal of the study is to document the major burden of disease in an elderly urban cohort at the beginning of the 21st century and compare these data with the data of young adults and with the respective results from BASE-I. Scientific collaborations are explicitly warranted (base@charite.de).

INTERACTIONS BETWEEN AGING AND GENES: A GENOMIC APPROACH TO NEUROMODULATION OF MEMORY AGING IN BASE II

S. Li¹, U. Lindenberger¹, I. Nagel¹, C. Preuschhof², C. Chicherio³, L. Nyberg⁴, H. Heekeren⁵, L. Bäckman⁵, 1. *Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany*, 2. *Free University of Berlin, Berlin, Germany*, 3. *University of Geneva, Geneva, Switzerland*, 4. *Umeå University, Umeå, Sweden*, 5. *Karolinska Institute, Stockholm, Sweden*

During the course of usual aging various neurotransmitter systems undergo declines. Some of these systems (e.g., dopamine and acetylcholine) are known to affect memory functions. The advent of molecular genetics has opened up possibilities for casting new lights on aging. In a large sample of younger (20 to 30 years) and older (60 to 70 years) Berlin residents we assessed working memory and episodic memory functions along with genetic data relevant for individual differences in transmitter functions (e.g., COMT, DAT) and other genetic factors related to memory functions (e.g., KIBRA and DBNF). We found that genetic effects on working memory and episodic memory were magnified in older adults, indicating interactions between genetic factors and aging. We plan to follow-up these individuals in the BASE II study with more comprehensive assessments of genetic, socio-economical, and brain measures to investigate interactions between neurobiological, lifestyle, and sociocultural factors in affecting cognitive and brain aging.

INTEGRATING LABORATORY SAMPLES INTO HOUSEHOLD PANELS: SELECTIVITY ANALYSES WITH THE COGITO SAMPLE

J.K. Wolff¹, A. Brose¹, F. Schmiedek^{1,2}, U. Lindenberger¹, G.G. Wagner^{3,4}, 1. *Max-Planck-Institute for Human Development, Berlin, Germany*, 2. *Humboldt University Berlin, Berlin, Germany*, 3. *German Institute for Economic Research, Berlin, Germany*, 4. *Technical University Berlin, Berlin, Germany*

The COGITO sample, a subsample of BASE II, comprises 101 younger adults aged 20-31 and 103 older adults aged 65-80 who were assessed on 12 cognitive tasks for 100 daily sessions. Intensive and extensive laboratory studies such as COGITO provide unique information on individuals' functioning but are prone to selectivity bias. To estimate the size of selection effects, 87% of the older and 51% of younger adults of the COGITO sample were integrated into the German Socio-Economic Panel Study (SOEP). Preliminary comparisons to SOEP data indicate that the amount and the pattern of selectivity differed by age group. For instance, older adults were more selective on psychological constructs such as life satisfaction, whereas younger adults were more selective on demographic characteristics such as household income.

SESSION 225 (SYMPOSIUM)

THE GERIATRIC NURSING LEADERSHIP ACADEMY: NURSE FELLOWS PREPARE TO LEAD BEST PRACTICES

Chair: D. Cleeter, *Sawgrass Leadership Institute, Ponte Vedra Beach, Florida, Sigma Theta Tau International, Indianapolis, Indiana*
Discussant: C. Fagin, *Hartford Centers for Geriatric Nursing Excellence, New York, New York*

The Geriatric Nursing Leadership Academy (GNLA) was initiated by an award from the John A. Hartford Foundation to Sigma Theta Tau International (STTI), the Honor Society of Nursing. A partnership was created between STTI and the five original Hartford Centers for Geriatric Nursing Excellence for the design and implementation of the Academy. This intensive eighteen month mentored leadership development program provides a rigorous intellectual and experiential learning opportunity which benefits the individual participants, their sponsoring institutions, communities, and the older adult population of the United States. The GNLA prepares and positions nurses in leadership roles in various health care settings to lead inter-professional teams in the improve-

ment of health care quality and outcomes for older adults and their families. As a measure of the increased organizational influence and community impact of the fellow, a professional activities evaluation related to changes in professional roles, policy and advocacy endeavors, research and education pursuits, and new leadership positions is conducted at mid-point and completion of the Academy. Subsequently, a nationwide network of geriatric nursing leadership mentors has been formalized and knowledge resources for geriatric nursing leadership and scholarship are being developed. The symposium will present both the educational model and outcomes for: the leadership program curriculum and teaching methodology, the fellow's interdisciplinary leadership project, the fellow-mentor-faculty relationship, and the organizational and community impact of the Academy.

JOHN A HARTFORD CENTERS OF GERIATRIC NURSING EXCELLENCE PARTNERSHIP WITH SIGMA THETA TAU INTERNATIONAL

M. Hurley, *Sigma Theta Tau International, Indianapolis, Indiana*

The John A. Hartford Foundation's significant and sustained commitment to nursing paralleled the decision of The Honor Society of Nursing, Sigma Theta Tau International (STTI) to focus efforts on the development of geriatric nurse leaders across practice settings. The Hartford Centers for Geriatric Nursing Excellence have contributed to the advancement of best practices in geriatric nursing since 2001. Throughout these eight years, a resounding theme of the need to develop a critical mass of geriatric nurse leaders exists. STTI was well positioned to partner in these efforts and utilize their developed infrastructure and eighty seven years of nursing leadership experience. Outcomes from the Hartford Centers of Geriatric Nursing Excellence and Sigma Theta Tau International partnership to increase the number of geriatric nurse leaders in the country will be presented.

MENTORING: KEY TO LEADERSHIP DEVELOPMENT

M. Maas, *College of Nursing, University of Iowa, Iowa City, Iowa*

Mentoring of GNLA Fellows is a key strategy of the leadership academy. Mentoring occurs at two levels: 1) each Fellow has a local mentor, and 2) a faculty mentor is also assigned to each Fellow/local Mentor dyad. This presentation will briefly describe the purpose and objectives of each level of mentoring. Expectations of mentors and mentees and the mentoring process and activities will be discussed. One or two examples of relationships between Fellows and Mentors and between local and faculty mentors and how mentoring contributed to leadership development outcomes will be presented. Results of Fellow and Mentor evaluations will be briefly summarized. Finally, lessons learned and how the lessons are contributing to planning for the next leadership academy will be shared.

THE LEADERSHIP PROJECT: IMPLEMENTATION AND EVALUATION

G. Pepper¹, T.A. Harvath², 1. *College of Nursing, University of Utah, Salt Lake City, Utah*, 2. *Oregon Health & Science University, Portland, Oregon*

Each fellow develops a project centered on improving quality of health care for older adults and their families. Projects serve as a platform for enacting leadership competency and skill, integrating the didactic and experiential content of the workshops and assignments. Fellows form an interdisciplinary project team in their practice settings or communities, with the support and guidance of the local mentor. Site visits by faculty facilitators, who are national leaders in gerontologic nursing, provide both functional assistance and enhanced local recognition for the projects and fellows. Examples of diverse projects and impact evaluation for the initial cohort included enhancing medication self-management skills; initiating an adult day care facility; enhancing staff's geriatric knowledge in diverse settings (emergency department, 900-bed hospital, LTC); implementing novel models in interdisciplinary

teams; NICHE certification; fall prevention without auditory alarms; improving collaboration among LTC surveyors and staff; and enhanced interdisciplinary and intradisciplinary communication and leadership.

PREPARING GERIATRIC NURSE LEADERS TO TRANSFORM HEALTH CARE DELIVERY

C.J. Beverly¹, K. Burke², 1. *Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*, 2. *University of Pennsylvania, Philadelphia, Pennsylvania*

The Geriatric Nursing Leadership Academy was created to address the dearth of geriatric nurse leaders in this country. This transformational leadership program is designed to equip geriatric nurses with the requisite knowledge and skill to implement system change in diverse health care settings. Participants are mid-career level with most being employed in health care settings in mid-management positions. During the Academy, fellows are provided opportunities to examine organizational behavior, strategies to influence and implement policy and strategically effect health care delivery in diverse settings. Fellows also examine the importance of navigating the political world within their organization as well as the larger health care arena. Results of ways in which policy and organizational behavior has been influenced by fellows will be presented. A synthesis of critical lessons learned by fellows will be summarized.

SESSION 230 (SYMPOSIUM)

UNDERSTANDING AGING PROCESSES: NOVEL STATISTICAL APPLICATIONS

Chair: R. Boudreau, *Univ of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*

Discussant: K. Bandeen-Roche, *Johns Hopkins University, Baltimore, Maryland*

Distilling a better understanding of aging processes, especially longitudinal change, poses interesting statistical modeling challenges. The usual toolbox includes multiple regression with change-scores, multivariate regression including mixed models, repeated measures, GEE and survival analysis. This symposium will present 4 illuminating applications involving new or novel statistical methods not widely used in the analysis of aging processes. Models predicting the onset of cognitive or mobility decline, called a “change point”, incorporate the natural history before and after such a change. Examples of the use of change point models in longitudinal aging will be presented and show how results from such models can inform clinical practice. In a cohort aged 75-85, a cluster analysis of 5 year changes in physiologic systems will be presented that identifies groupings of co-stable systems and also individuals with the highest stability – those with the healthiest aging. Many scientific investigations collect both longitudinal and survival data. Using data from the Women’s Health and Aging Study II, a joint model will be presented of the trajectories of change in hip and knee strength while simultaneously evaluating the impact of such change on incident falls and disability. Longitudinal cohort studies of aging face intermittent missed visits and increasing rates of home or phone contacts replacing clinic visits as the cohort ages. Recent developments in imputation and comparative sensitivity analysis will be presented designed to assess and overcome these limitations. These approaches are useful methods for understanding aspects of aging otherwise missed using the usual methods.

APPLICATIONS OF CHANGEPOINT METHODS IN AGING FOR IDENTIFYING OR PREDICTING TIME OF ONSET OF COGNITIVE DECLINE, MOTOR DECLINE AND DISABILITY

C.B. Hall, *Epidemiology and Population Health, Albert Einstein College of Medicine, Bronx, New York*

In longitudinal studies of aging, repeated observations over time are collected on such outcomes as memory and other cognitive domains, mobility, ability to perform activities of daily living, bone density, and mood. In some individuals, the natural history of the aging process, as manifested by such measures, undergoes a change, which can signal incipient disease, disability, or mortality. Change point models may be used to model the time at which such a change occurs along with the natural history before and after such a change. Furthermore, the change point itself may depend on risk factors that could possibly be targets of intervention studies to prolong healthy aging. In this talk we will give examples of the use of change point models in longitudinal aging and show how results from such models can inform clinical practice.

JOINT MODELING OF LONGITUDINAL AND SURVIVAL DATA: ASSESSING THE IMPACT OF CHANGE IN LOWER EXTREMITY MUSCLE STRENGTH ON INCIDENT FALLS, ADL, AND IADL DISABILITY IN OLDER WOMEN

Q. Xue¹, B.A. Beamer², K. Bandeen-Roche¹, L.P. Fried³, 1. *Medicine, Johns Hopkins University, Baltimore, Maryland*, 2. *University of Maryland School of Medicine, Baltimore, Maryland*, 3. *Columbia University Mailman School of Public Health, New York, New York*

Many scientific investigations collect both longitudinal and survival data, aiming to assess the prognostic value of a longitudinal process on the natural history of an incident event. Well-established methods exist for analyzing longitudinal and survival data separately. However, when the availability of the longitudinal measurement depends on the survival endpoint, a joint modeling approach is warranted for unbiased and efficient statistical inferences. Using data from the Women’s Health and Aging Study, we characterized trajectories of change in knee strength over time and simultaneously evaluated their associations with incident falls and disability. We found that every one SD (0.2 kg/year) increase in the rate of decline in knee strength was associated with 2.0 and 2.5-fold increased risk of incident IADL and walking disability, respectively, after adjusting for knee strength at age 70 ($p < 0.01$). These data are in support of monitoring change in knee strength as a precursor to adverse health outcomes.

MAKING SENSE OF LONGITUDINAL TRAJECTORIES IN AGING COHORTS: WHAT ABOUT BIAS DUE TO INFORMATIVE DROPOUT AND DEATH?: IMPUTATION METHODS TO THE RESCUE

B. Yu¹, R. Boudreau², F. Thomas³, M. Garcia¹, T. Harris¹, 1. *National Institute on Aging, Bethesda, Maryland*, 2. *University of Pittsburgh, Pittsburgh, Pennsylvania*, 3. *University of Tennessee Health Science Center, Memphis, Tennessee*

The problem of analyzing longitudinal data has been an active area of aging research. Two types of approaches have been used to describe the longitudinal trajectories of biological markers: the marginal approach and the conditional subject-specific approach. The analysis of longitudinal data may be biased because of missing data due to dropout or death of study participants, which should be treated differently. A common research questions is the distribution of outcomes that we would have hypothetically observed if the participants had not dropped out but conditional on not dying. In aging studies, multiple imputation is an effective method to deal with missing data. However, in aging epidemiology the method is not widely used and its performance has not been investigated. We discuss the use the multiple imputation to account for possibly informative missing data. For illustration, we analyze the trajectories of cognitive function from a longitudinal aging study.

RANDOM SPAGHETTI OR CLUMPS?: A CLUSTER ANALYSIS OF LONGITUDINAL CHANGES IN PHYSIOLOGIC SYSTEMS IN THE ELDERLY TO IDENTIFY CO-STABLE SUBGROUPS OF SYSTEMS AND INDIVIDUALS EXHIBITING THE HEALTHIEST AGING

R. Boudreau, A.B. Newman, *Dept of Epidemiology, Univ of Pittsburgh, Pittsburgh, Pennsylvania*

A considerable amount of research is devoted to the characterization of healthy aging and the identification of markers and phenotypes related to healthy aging. Longitudinal data on individuals from the Cardiovascular Health Study on concurrent changes over 5 years were inter-related for several physiologic systems including endocrine, brain, lean and fat mass, pulmonary and arterial wall thickness. Each individual's physiologic systems were evaluated as relatively stable or declining. Stability was defined as minimal change over time, but also maintenance within a relatively normal range of adult values. A between-system similarity matrix was calculated using kappa statistics to measure the degree of co-stability. An analysis of this longitudinal data will be presented using cluster analysis which identified groupings of co-stable systems, systems with uncorrelated patterns of change, and also identified those individuals with the highest stability – those with the healthiest aging.

SESSION 235 (SYMPOSIUM)

CIVIC ENGAGEMENT IN AN OLDER AMERICA

Chair: G. O'Neill, *The Gerontological Society of America, Washington, District of Columbia*

This symposium will explore how the current economic crisis coupled with the new national service legislation (the Edward M. Kennedy National Service Act) will redefine and reinvent civic engagement in later life.

SESSION 240 (PAPER)

HEALTH INSURANCE

PROVIDING HEALTH INSURANCE COVERAGE TO LONG-TERM CARE WORKERS IN MINNESOTA

C. Gruman¹, L. Knatterud², B. Wright¹, L. Alecxih¹, *1. The Lewin Group, Falls Church, Virginia, 2. Minnesota Dept. of Human Services, Minneapolis, Minnesota*

Through its many programs that fund long-term supports and services, the Minnesota Department of Human Services (DHS) has an enormous investment in the workforce that provides hands-on, day-to-day, direct services for individuals with disabilities. To meet its obligation to the thousands of Minnesotans who rely on these services, DHS must ensure the availability of a strong, well-qualified direct service workforce across the many settings in which support is provided. High staff turnover and vacancies in the long-term services field are urgent concerns to many states. A growing number of studies indicate that health coverage plays a powerful role in recruitment and retention. In 2007, the Minnesota Health Care for Long-Term Care Workers workgroup recommended that the legislature study the costs and provide a rate increase to long-term care providers designed for the purchase of employee health insurance. In response to this mandate, the Lewin Group surveyed 5,200 LTC providers and 5,500 long-term care workers from across Minnesota. Topical areas included: current health coverage (public vs private vs none), length of time in the LTC field, demographic information, potential insurance take-up rates, and experiences with the health care system. Results indicate that 68% of agencies/providers operated with a net profit in FY 08. The majority (51%) operate as for-profit corporations. The typical PCA/DCW salary is \$10.75/hr. Approximately one-half of providers do not offer benefits to full-time direct service workers. Three insurance models along with costs will be presented.

THE EFFECT OF UNIVERSAL HEALTH INSURANCE ON THE HEALTH OF OLDER ADULTS IN TAIWAN

A. Prakash, M. Ofstedal, A. Hermlin, Y. Lin, *University of Michigan, Ann Arbor, Michigan*

Health is one of the most important assets for an individual which depreciates with age. Over the life course, the rate of depreciation could be minimized with the help of individual and public actions. In 1995, the government of Taiwan took action to provide health care to all its citizens by implementing a universal health insurance program (UHIP). In this study, we examine the effect of the acquisition of health insurance under UHIP on the health of older adults in Taiwan. Analyses are based on longitudinal data from the Survey of Health and Living Status of the Middle-Aged and Elderly in Taiwan (1989-2003). We use multivariate regression to examine trajectories in self-rated health over the study period as a function of prior health insurance status, controlling for sociodemographic and health indicators. Preliminary results suggest that the gap in self-rated health between those who did and did not have health insurance prior to UHIP was eliminated after the introduction of UHIP. Implications of these results provide potential guidelines for designing and implementing similar policies in other developing countries.

PREDICTING ENROLLMENT INTO THE MEDICARE PART D LOW INCOME SUBSIDY PROGRAM USING ENHANCED FINANCIAL INDICATORS

J. Shoemaker^{1,2}, B. Stuart^{1,2}, A.J. Davidoff^{1,2}, T. Shaffer^{1,2}, J. Lloyd^{1,2}, *1. Pharmaceutical Health Services Research Department, University of Maryland, Baltimore, Baltimore, Maryland, 2. The Peter Lamy Center for Drug Therapy and Aging, Baltimore, Maryland*

The Medicare Part D Low Income Subsidy (LIS) was created to eliminate financial barriers to drug coverage for vulnerable beneficiaries. Most eligible beneficiaries must apply before enrolling into the program and there is concern of low take-up. The Medicare Current Beneficiary Survey (MCBS), which contains administrative Medicare enrollment data, would seem to provide an ideal resource for evaluating determinants of LIS take-up among eligible beneficiaries. Limitations of the MCBS include under-reporting of income and lack of explicit asset information, both essential to determine eligibility. This study enhances the reliability of MCBS financial information using unique data on sources of income and assets for MCBS participants, and an income prediction model based on the Current Population Survey (CPS). Determinants of LIS enrollment among eligible beneficiaries were examined utilizing these new measures to identify the eligible cohort. When introducing CPS-based predicted income and MCBS self-reported asset levels, preliminary analysis show that 17% of beneficiaries were eligible for LIS, 58% of whom enrolled by the end of 2006. The proportion of ineligible enrollees decreased from 3.2% to 1.7% when considering the enhanced eligibility criteria. Similarly, the prediction method shows that unadjusted, the MCBS overestimates the proportion of eligible beneficiaries who are married, employed, white, more educated and of excellent health status ($p < .05$). Multivariate logistic regression estimates that among eligible beneficiaries, the probability of enrolling into LIS is positively associated with being female, under the age of 75, of poor health and additional monthly prescription fills ($p < .05$).

HEALTH STATUS DIVERSITY IN THE RHODE ISLAND COMMUNITY-DWELLING ELDERLY DUAL ELIGIBLE POPULATION

S.M. Allen, J. Lima, M. Clark, *Community Health, Brown University, Providence, Rhode Island*

Little is known about the characteristics of the community dwelling elderly population who are "dual eligible," i.e., covered by both Medicare and Medicaid. As states seek to balance long term care by expanding community-based options, a better understanding of the current health status of this population is warranted. For purposes of program plan-

ning, we conducted a needs assessment survey commissioned by the RI Medicaid program, to determine the extent of diversity in health status, disability, service needs and social support of a random sample (n=612) of the community-based dual eligible population. Interviews were conducted by phone, with a response rate of 33.8% of those contacted. We categorized respondents into categories of “risk” for Medicaid community-based waiver status. A total of 15% of respondents were current Waiver Participants, and an additional 11% were classified as Waiver Eligible, based on self-report of need for assistance with activities of daily living (ADLs). Thirty five percent were classified as being at High Risk for Waiver Eligibility, based on self report of need for help with Instrumental Activities of Daily Living (IADLs) but not ADLs, and 39% were classified as Low Risk for Waiver Eligibility, based on the absence of need for help with ADLs and IADLs. Survey results are reported by these categories, thus providing a useful tool for projecting service need in the dual eligible population for service development and expansion.

THE POLICY IMPACT OF MEDICARE PART D: ARE SENIORS WITH THE HIGHEST LEVELS OF PRE-PART D OUT-OF-POCKET DRUG SPENDING IMPACTED MOST?

D. Mott^{1,3}, J.M. Thorpe^{1,3}, C. Thorpe², D.H. Kreling^{1,3}, A. Gadkari^{1,3}, 1. University of Wisconsin School of Pharmacy, Madison, Wisconsin, 2. University of Wisconsin Population Health Sciences, Madison, Wisconsin, 3. Sonderregger Research Center, Madison, Wisconsin

The data source was a database of prescriptions (n=1,230,612) dispensed between January 1, 2005 and December 31, 2007 for patients age 60 or older (n = 51,305) as of January 1, 2005. A quasi-experimental, pretest-posttest, nonequivalent control group design was used. The pre-period was calendar year 2005 and the post-period was calendar years 2006 and 2007. Dependent variables included total drug spending, out-of-pocket (OOP) drug spending, and pill-days of medication. Study subjects were placed into one of three (high, moderate, low) pre-Part D out-of-pocket drug spending categories. Other covariates included patient age and gender. Difference-in-difference regression models were estimated. Individuals eligible for Part D (n = 11,133) had significantly higher OOP drug costs and drug utilization in 2005 compared to individuals ineligible for Part D (n = 1,625). Adjusted means showed the policy effect included a significant 17% decrease in OOP drug spending and a significant 4% increase in drug use for Part D eligible individuals. Individuals with the highest pre-Part D OOP drug spending experienced a significant 17.6% decrease in OOP drug spending and a significant 4% increase in drug use. Individuals in the moderate pre-Part D OOP drug spending category experienced a significant 7% increase in drug use, but no significant decrease in OOP drug spending. Not all seniors responded equally to Part D, and the modest increases in drug use suggest unmet demand for prescription drugs existed prior to Part D. The significant changes in OOP drug spending suggest drugs became more affordable for eligible seniors.

SESSION 245 (SYMPOSIUM)

MEASURING END-OF-LIFE CARE AND OUTCOMES IN NURSING HOMES AND RESIDENTIAL CARE/ASSISTED LIVING SETTINGS: EMERGING FINDINGS REGARDING MEASUREMENT AND QUALITY IN THE UNITED STATES AND THE NETHERLANDS

Chair: S. Zimmerman, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Discussant: D.R. Mehr, University of Missouri, Columbia, Missouri

Long-term care (LTC) settings have become a common site for end-of-life care. In both the United States and the Netherlands, 20-25% of all deaths occur in nursing homes and other residential LTC settings. As the prevalence of dying in LTC has increased, so too has the amount and breadth of research focused on end-of-life care and outcomes. However,

almost all LTC research relies on measures that were not developed specifically for this population, and most of the measures assess care structures, processes, and outcomes without differentiating one from the other. The lack of distinct measures that are targeted to LTC settings complicates quality improvement in this growing area. This symposium will present the results of an international collaborative that critically evaluated measures related to the quality of end-of-life care and the quality of dying in LTC in the United States and the Netherlands. The same nine measures were used in both countries, and in both countries data were obtained from family members of individuals who died in LTC settings; in the Netherlands, data also were collected from health care providers. This symposium will present conceptual findings related to a model that differentiated items of care quality from care outcomes; psychometric findings related to a factor analysis that used items from all measures to develop separate measures of care and outcomes; and descriptive findings that present, compare, and contrast care and outcomes in the U.S. and the Netherlands.

A CONCEPTUAL FRAMEWORK FOR EVALUATING MEASURES OF END-OF-LIFE IN LONG-TERM CARE

M. van Soest-Poortvliet¹, S. Zimmerman², R. de Vet¹, J. Munn³, J.T. van der Steen¹, L.W. Cohen², 1. VU University Medical Center, EMGO Institute, Amsterdam, Netherlands, 2. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, North Carolina, 3. Florida State University, Tallahassee, Florida

This study evaluated nine publicly available measures that have been used to assess the quality of end-of-life care and the quality of dying in long-term care settings: for example The End-of-Life in Dementia scales and the Quality of Dying in Long-term Care. Using qualitative content analysis, we classified all individual scale items into a previously developed conceptual model, separating patient factors, the structure and process of care, and outcomes of care. This evaluation indicated that some existent measures of end-of-life that have been used in long-term care settings do not measure one single concept.

END-OF-LIFE IN LONG-TERM CARE IN THE NETHERLANDS: NEW FINDINGS AND MEASUREMENT ISSUES

J.T. van der Steen¹, M. van Soest-Poortvliet¹, W. Achterberg¹, M. Ribbe¹, R. de Vet¹, S. Zimmerman², L.W. Cohen², 1. VU University Medical Center, EMGO Institute, Amsterdam, Netherlands, 2. Cecil G. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, North Carolina

Similar as the parallel US study, we retrospectively collected data from family caregivers of nursing home and residential care patients with dementia who were deceased. Additionally, we retrospectively collected data from professional caregivers and prospectively professional caregivers observed nursing home patients with dementia having a life expectancy of one week or less. Data collection involved both surveys and interviews. Measures addressed issues relevant to end-of-life and palliative care. So as to evaluate the reliability and validity of the measures, we performed standard tests, and asked respondents to report perceptions of perceived relevance and ease of answering. We observed differences in relevance and difficulty between the measures, and specifically found that measures not developed for dementia patients were perceived as less relevant.

END-OF-LIFE IN LONG-TERM CARE IN THE UNITED STATES: NEW FINDINGS AND MEASUREMENT ISSUES

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This project administered nine measures of care and dying to 264 family caregivers of decedents from 118 nursing homes and residential care/assisted living communities in four states. One-third of residents were unconscious before death; one quarter were alone when they died; and almost one-half were on hospice. When rating the relevance and ease of use of items from the existing measures, those that captured a longer period of time (e.g., three months) were generally thought to be more relevant although more difficult to answer than those that captured a shorter period (e.g., three days before death). Also, it was challenging to respond to questions about healthcare providers due to the many such individuals who provide care. In addition to providing scores for each individual scale, the results of an “omnibus” factor analysis of all items that is grounded on a conceptual framework that separates care from outcomes will be presented.

DIFFERENCES IN THE END-OF-LIFE EXPERIENCE IN THE UNITED STATES AND NETHERLANDS

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We administered nine measures of end-of-life care and outcomes to family and other respondents of LTC decedents in the U.S. and Netherlands, and also asked these respondents to rate the perceived difficulty and relevance of the items. Overall, U.S. and Dutch respondents reported high quality of care and quality of dying, although there was a general tendency for U.S. respondents to rate all areas more favourably. It is possible that sampling differences, translation effects, and social desirability influenced this response pattern. However, it may also be that country-specific differences in the health care systems and care provision contributed to the observed differences. These interpretations and their implications for policy, practice, and further research will be discussed.

SESSION 250 (SYMPOSIUM)

REPORTS FROM STATE UNITS ON AGING: SHIFTING THE BALANCE TO HOME- AND COMMUNITY-BASED SERVICES (HCBS)

Chair: L. Noelker, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

Discussant: R. Browdie, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

This symposium reports on progress made by the states to shift the balance of Medicaid dollars from nursing homes to Home and Community Based Services (HCBS) programs. The Benjamin Rose Institute sought to gather information from 50 State Units on Aging (SUAs) and the District of Columbia (DC) and profile HCBS programs targeted to the elderly and adults with physical disabilities. In contrast to previous studies examining a smaller number of states or HCBS funded under a specific source, this study provides a broader understanding of each state's infrastructure for HCBS. Included are the role of SUAs in HCBS programs and the scope and components of HCBS under multiple funding streams. Information was collected from 48 SUAs and DC in two phases to create the individual state profiles and conduct cross-state comparisons of HCBS programs. An overview of the project is presented detailing its design and methods, followed by findings on services offered under Medicaid waivers, Title III, state-funded programs, state Medi-

caid plan, and CMS grants and demonstrations. Findings on features of Single Entry Points (ADRCs) and consumer-directed programs are presented along with their role in balancing HCBS. Key policy-related findings and recommendations are discussed, such as the complex structures states have developed to manage the broad range of programs and funding streams and infrequent reports about some services (e.g., mental health, employment) in HCBS programs. The discussants address the salience of the findings and policy recommendations for helping states in their efforts to balance long term care options.

AGING STRATEGIC ALIGNMENT PROJECT: OVERVIEW AND DESIGN

M. Castora, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

The goal of this presentation is to provide a reference for the overall symposium. First, the notion of rebalancing will be discussed; what does rebalancing mean, why rebalance? Next, the presentation will focus on introducing the Aging Strategic Alignment Project, including the purpose of the project which was to obtain information from the State Units on Aging (SUAs) about all HCBS programs for the elderly and adults with physical disabilities and then profile each state. The discussion will include how participants were recruited and how the information was collected (i.e. online questionnaire, interview and verification process). The overall participation includes 49 out of 51 SUAs. Reaching this goal required 694 total contacts with 157 informants. The methodological challenges faced in regards the scope of information collected as well as the challenges faced in regards to the methods of data collection will shed light for future national state-level projects.

HOME- AND COMMUNITY-BASED SERVICES OFFERED TO ELDERS AND PHYSICALLY DISABLED ADULTS NATIONWIDE

M. Rose, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

A broad array of home- and community-based services (HCBS) are offered to elders and to adults with physical disabilities under programs funded by Medicaid waivers (104 programs), CMS (42), and states (71), and through state Medicaid plans and Title III of the Older Americans Act. Data regarding 21 categories of services offered in 48 states and Washington, DC, were collected. The most frequently reported services included home health and personal care under state Medicaid plans (84% of the states), Medicaid waivers (80%), and state funding (61%); chore and homemaking services under state funding (61%); caregiver services, respite and education under CMS funding (39%); and information and referral under Title III (96%). Yet the least frequently reported, e.g., mental and behavioral health, employment support and health promotion services, may also be critical to shifting the balance of Medicaid expenditures from institutional to community-based care.

ISSUES RELATED TO REBALANCING LONG-TERM CARE: DEVELOPMENT OF SINGLE POINTS OF ENTRY AND CONSUMER DIRECTION

F. Ejaz, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

This presentation draws on data describing how HCBS are provided in 48 states and D.C. We focused on two key issues related to rebalancing long-term care (LTC) in favor of increasing HCBS to help consumers avoid institutionalization: a) the creation of Aging and Disability Resource Centers (ADRCs) or Single Entry Points (SEPs) to coordinate access to information and referral; and, b) the extent to which HCBS allow consumer direction to help consumers choose providers, including family members. Fourteen states reported having statewide ADRCs/SEPs, and eight indicated that they planned to become statewide. Twenty-six states reported using consumer directed options in two-thirds of their HCBS programs. Eleven states reported that all of their HCBS programs offered consumer direction. Such findings indicate that some

states are making important strides towards rebalancing LTC by coordinating information and providing consumers with more choices.

POLICY APPROACHES TO HELP STATES STRENGTHEN INFRASTRUCTURE FOR HCBS

L. Noelker, *Katz Policy Institute, Benjamin Rose Institute, Cleveland, Ohio*

Information was obtained from 157 persons (a total of 694 contacts) with the 48 states and DC to compile HCBS profiles because the programs crosscut multiple agencies and employees had specific areas of expertise. The results underscore the complexity of state structures for managing HCBS programs, raising issues about resource expenditures and operational efficiencies. They suggest federal agencies might consider both financial incentives and program requirements that encourage states to coordinate and streamline their systems. While states offer a broad array of HCBS services for elderly and adults with disabilities under the five funding streams, certain services were infrequently reported. These include mental and behavioral health, employment, and health promotion services. Some policy recommendations to help states broaden the availability of these services include having the ADRCs screen, assess and refer for these services and advocacy for legislation that promotes work opportunities for older adults.

SESSION 255 (SYMPOSIUM)

THE CREATIVE USE OF QUALITATIVE RESEARCH METHODS

Chair: A.B. Kydd, *Health Nursing and Midwifery, University of the West of Scotland, Hamilton, Lanarkshire, United Kingdom*

Discussant: L.K. Donorfio, *University of Connecticut, Waterbury, Connecticut*

Qualitative research, to the uninitiated, may appear to consist of interviews with a small number of participants, either as individuals or in focus groups. However, there are a wealth of creative qualitative data collection strategies used to explore and uncover meanings and understandings in context. This symposium presents a wide variety of exciting and creative qualitative methods by experienced UK researchers. The speakers will outline the methods they used and the challenges they faced. The first study outlines an eight partner EU project consisting of 560 interviews in 7 languages. Biographies coupled with visual aids is presented in the second study, case studies on life intersections and clothing in the third study, interviewing couples - together and individually on the management of household money in the fourth study, and finally, the fifth study looks at the use of spider diagrams to show the relevance and importance of social support during transitions. The symposium illustrates the opportunities and possibilities open to qualitative researchers.

RESEARCHING THE DRESSED BODY: CLOTHING, AGE AND THE BODY

J. Twigg, *Sociology and Social Policy, University of Kent, Canterbury, United Kingdom*

The paper discusses the methodological issues raised by attempting to explore older women's views and experiences of dress. The research is located in debates on identity, the body and the changing nature of old age in late modernity. Clothes mediate between the body and the social world. They thus offer fertile territory in which to discuss the constitution of age and the possible role of cultural artefacts in it. The main part of the study was based on qualitative interviews with older women, aged 55 and upwards. But clothing is an inherently visual and concrete subject. In order to reflect this, photographs were taken of the respondents in their own homes, who were then asked to comment on what they were wearing. Garments discussed in the interviews were also photographed. The paper will address the methodological and practical issues raised by this aspect of the study.

QUALITATIVE METHODOLOGY IN A MULTI-LINGUAL, MULTI-CULTURAL CONTEXT: THE CHALLENGES AND REWARDS

K. Davidson, S. Arber, *Sociology, University of Surrey, Guildford, United Kingdom*

This paper describes the complexities of co-ordinating qualitative methodology for the eight partner, European Union research project "Senior Food - QOL". The authors led a WorkPackage which examined the role of food in formal and informal networks in later life. Semi-structured interview schedules and coding trees were created and then translated into the language of the participating countries: Germany, Italy, Poland, Portugal, Spain and Sweden. Eighty interviews were carried out and initially analysed in each country: a total of 560 in 7 languages. With the aid of the software package MAXqda, the principal themes and concepts were identified, translated into English and sent to the authors for cross-cultural analyses. We found the greatest challenge was in trying to measure linguistic and cultural equivalence in such rich and diverse data. However, excellent communication and dedication of all the research partners allowed us invaluable insight into multi-cultural similarities and differences in Europe.

THE USE OF VISUAL IMAGES TO ELICIT INSIGHTS INTO AGEING BODIES

W. Martin, *School of Health and Social Care, University of Reading, Reading, United Kingdom*

The aim of this paper is to explore how the development of a visual methodology can elicit insights into social identities, ageing bodies and daily lives. With illustrations from data, this paper will first report findings from a study that explored visual images associated with health, risk and well-being targeted at people aged 50 years and over. It will be shown that two themes emerged: 'active ageing' and 'health, risk and dependency'. Perceptions of risk were heightened by intersecting images of domesticity with symbols of risk, danger and alarm. Gender, ageing and the body were further intertwined within these visual images. Second, the paper will show how visual images can be incorporated into biographical interviews. The method of photo-elicitation not only facilitated participants to reflect on their own meanings and identities associated with ageing and bodies, but highlighted the significance of their biographies to the interpretation of visual images.

INTERVIEWING OLDER COUPLES: PRESENTATION OF SELF AND COUPLEDOM IN JOINT AND SEPARATE INTERVIEWS

D. Price, D. Bisdee, T.I. Daly, *Institute of Gerontology, King's College London, London, United Kingdom*

Interviews are understood by qualitative researchers as a site for the construction of identity, and as a site of collaborative co-production of data between interviewer and interviewee concerned as much with the present and future as the past. As part of a multi-methods ESRC project 'Behind Closed Doors: Older Couples and the Management of Household Money', 45 older couples were interviewed about money practices, jointly by a male and female researcher together, and then separately by the researchers in individual interviews. This paper considers the significance and meaning of the presentation of 'coupledom' by older people in these interview contexts. We reflect on how older couples use their descriptions of money practices within the interviews as a means by which they create a joint narrative to the outside world (in the form of the researchers) of successful coupledom, and the extent to which these narratives constrain accounts of money practices.

INVESTIGATING CHANGES IN SOCIAL NETWORKS IN MARITAL STATUS TRANSITIONS USING QUALITATIVE METHODS

K.M. Bennett, L.K. Soulsby, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Social networks, social relationships and sources of social support are known to change as a consequence of transitions into and out of marriage. However, the challenge in investigating these is to avoid a boring, repetitive interview. We retrospectively interviewed twenty men and women who experienced transitions into marriage and out of marriage through widowhood and divorce, with married controls. Participants drew a spider diagram highlighting the members of their social networks and providers of social support before transition. Interviews focussed on social relationships, support and wellbeing. Next, participants were asked to redraw the diagram to represent post transition and were interviewed about the changes that had occurred. The whole process was recorded and transcribed. The transcribed interviews combined with the before and after diagrams provided fruitful data. The results demonstrated that those entering marriage increased their social networks whilst those leaving marriage found their networks to shrink.

SESSION 260 (SYMPOSIUM)

THE GREENHOUSE MODEL : AN OVERVIEW WITH INSIGHTS INTO WORKFLOW AND THE ROLE OF THE NURSE

Chair: *B.J. Bowers, Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

Discussant: *R. Stone, Institute for the Future of Aging Services, American Association of Homes and Services for the Aging, Washington DC, District of Columbia*

In an effort to increase both quality of care and quality of life for nursing home residents while also creating an environment that supports and nurtures the staff, culture change initiatives have been widely developed and embraced. Although adopted widely throughout the industry, little is known about how these models differ from one another, the processes used to implement culture change initiatives, their impact on resident care and quality of life, and how the work might differ from that in traditional nursing home settings. This symposium will present an overview of The GREENHOUSE Model of nursing home culture change and the findings from two recent studies of GREENHOUSE HOMES. Both studies were supported by the Robert Wood Johnson Foundation. Both studies included extensive interviews and site visits to 14 skilled level GREENHOUSE Homes around the country. The first paper presents an overview of the GREENHOUSE Model, including the history, philosophy and special features of the GREENHOUSE Model. The second paper presents a workflow study. It provides a comparative analysis of traditional nursing homes with GREENHOUSE HOMES on the same campus. The third paper presents a study of the nurse's role in the GREENHOUSE Model, including how the nurse's role has evolved, how it compares with more traditional nursing home work, and the implications for resident quality of care and quality of life. Our discussant will focus on the implications of findings from these studies for the development of national and state level public policy.

THE ROLE OF THE NURSE IN THE GREENHOUSE MODEL

B.J. Bowers, K. Nolet, *Nursing, University of Wisconsin-Madison, Madison, Wisconsin*

THE GREEN HOUSE® model is designed to create a nurturing environment for both residents and workers in nursing homes while also providing high quality care. One of the most interesting and significant GREEN HOUSE® innovations is the shift in the nurse's role from general unit manager and supervisor of front line staff to that of a clinical care consultant. This project explored the role of the nurse in current THE GREEN HOUSE® skilled nursing homes, including variations in

how the nursing role has been implemented across sites, and how these variations relate to resident care and quality of work life. Over 80 staff were interviewed. This discussion includes: a description of four different models used to implement the GREENHOUSE model and a discussion of the implications of each model for: care practices, staff development, staffing, communication between nurses and Shahbazim resident quality of life and work life quality.

THE GREEN HOUSE PROJECT: TRUE TALES OF TRANSFORMATION

A. Ortigara, *THE GREEN HOUSE Project, NCB Capital Impact, Tinley Park, Illinois*

THE GREEN HOUSE® model is a de-institutionalization effort that restores individuals to a home in the community. It combines small homes with the full range of personal care and clinical services expected in high-quality nursing homes. Green House® homes typically are licensed as nursing homes but may be created under assisted living or other residential care regulations under certain circumstances. The Green House model of elder care is a total re-envisioning of a skilled nursing home creating an intentional community to support the most positive elderhood and work life possible. To achieve these goals, the model changes the philosophy of care, staffing assumptions, organizational configuration, and architecture.

ANALYSIS OF NURSE AIDE WORKFLOW AND ASSOCIATED COSTS AMONG GREEN HOUSE SITES

S. Sharkey, *Health Management Strategies, Austin, Texas*

The principal objective of this Workflow study was to understand how workflow in the Green House model compares to workflow in the traditional nursing home. Specifically, the study focused on several core processes related to daily direct and indirect care for the elderly, the variation in workflow across Green House sites, and cost differences based on workflow findings. Data were collected from 14 Green Homes and 13 traditional nursing facilities. Findings related to nurse aide direct care time per elder, elder meal process experience, and staff feedback will be shared.

SESSION 265 (POSTER)

TRAINING STUDENTS AND CHANGING ATTITUDES - POSTER

EVALUATION OF A MODEL RETIREMENT COMMUNITY THAT TRAINS GERONTOLOGY STUDENTS IN A RESIDENTIAL PROGRAM

A. Chandra, *1. UC Berkeley, Berkeley, California, 2. UCSF, San Francisco, California*

Objectives The goal of this study was to qualitatively evaluate the extent to which a residential working student program, hosted by the retirement community of interest, met its stated objectives, such as social interaction, gerontology training, increased research on-site, cost effectiveness, and sustainability. This student program is the oldest of two such in the nation, and had never been systematically studied. **Methods** Fifty interviews were conducted with residents, working students, employees, and key informants. Interviews were supplemented by direct participant observation and document analysis of historical and financial data. Using organizational theory and adapted grounded theory methodologies, data were analyzed to determine whether program goals were being met, and to identify the ways in which the program affected the working students and residents on a daily basis. **Findings** Four goals for the student program were identified by the retirement community and its partner university: improving residents' social interactions, bringing in research, increasing publicity, and training future gerontologists. All four goals were at least partially met; however, those concerning residents' social interaction and students' training were better met than

those stemming from partnership with the university. In addition, the program was both financially feasible and sustainable. **Discussion** Given that our aging society has prompted gerontology educators to focus on experiential learning, and that intergenerational relationships can address elders' social isolation and lack of support, this working student program is a promising model for sustainable learning and positive interactions between residents and students. It may be applicable to other, similar retirement settings.

TRAINING GERIATRIC SOCIAL WORKERS FOR NEW MARKET REALITIES

L. Vinton, J. Hinterlong, *Florida State University, Tallahassee, Florida*

The need for geriatric social workers to meet demographically-related new market realities is well-documented. The Live Oak Geriatric Practicum Partnership Program ("Program") is a Hartford Partnership Program for Aging Education. Over three years, the Program provided 34 students with intensive preparation for positions in health, mental health, and social services agencies that serve elders and caregivers. The Program employed two models: 1) alternating—students alternated between at least two sites; and 2) consecutive—one after the other. An objective was to expose students to elders with various functional levels. Two professors specializing in geriatric social work provided instruction and field supervision. The Geriatric Competency Scale II was administered as a pre-posttest. It measures knowledge of aging for geriatric social work, knowledge of services for older adults, and skills. Results after two years showed that overall pre-posttest change in terms of knowledge was not significant, but almost all students had taken aging courses prior to their internships. On the other hand, on a scale of 1 to 5 (1=not skilled; 2=beginning; 3=moderate; 4=advanced; 5=expert skill), increases in self-rated competency scores were seen for all domains: values, ethics and theoretical perspectives (2.81-3.64); assessment (2.53-3.62); intervention (2.31-3.40); and aging services, programs and policies (1.72-2.55). Success was also evidenced by employment. Students went on to work in hospice, hospital, nursing home, respite, community-based agency, and state and area agency on aging settings; thus, it appears that an intensive, rotational geriatric training program was effective in training social workers for new market realities.

WHAT DO BOOMERS WANT? A NATURALISTIC ANALYSIS OF WEBSITE BLOG TRAFFIC

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To determine what issues are of greatest concern to members of the post World War II ("Boomer") generation we conducted a naturalistic analysis of website traffic during the first 44 days following launch of a Boomer-oriented website: ImagineAge.com. Blogs were posted in five broad categories: Healthy, Wealthy, Wise, Trends, and Workshops. During the initial 44-day period there were 7,280 page visits, and more than 3,954 visits to the blogs in these five categories, with an average of 165 page visits per day. The most widely-accessed blogs were in the Healthy category (49%); these included discussions of stress, caregiving, psychotherapy, and medical tests (i.e., mammograms). The Wise and Trend Categories each had about 15% of the visits (blog topics in these areas included social networking, email management, and new technology trends). Next, 12% of the visits were to the Wealthy category, which included topics such as 401ks, the current state of the economy, and money management. Finally, 9% of visits were to the Workshops category (e.g., computer basics for boomers). Visits increased steadily over time for all categories. These findings suggest that there is strong interest among boomers in learning about psychology, finance, technology, and health related topics. Future analyses will examine differences in

topic-specific interest as a function of gender and other demographic variables.

YOU GO GIRL: WOMEN'S EMERGING POSITIVE ATTITUDES TOWARD AGING

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Attitudes toward aging have continued to evolve as society changes. How we feel about our own aging has changed as longevity and the older population have increased. Recent work has suggested that fear of aging is influenced by education, income, race, age, and locus of control. Less clear is the role of gender in outlook on aging. Some research has found that men and women differ in their views of old age (women more negative than men) while others have found no differences. The present report, part of a larger study on attitudes toward aging, sampled 633 women and 345 men (N = 978) on a number of variables related to aging attitudes. Both men and women were more likely to say that old age is a happy rather than unhappy time, $X^2(2) = 5.91, p = .05$. There were no significant differences in answers to the direct question of fearing growing old. However, women were less likely to dread looking old ($F(1, 952) = 7.05, p = .008$) and more likely to expect to feel good about life when old ($F(1, 958) = 4.34, p = .038$). These findings contradict both previous findings and popular opinion that women see themselves aging negatively. Findings are discussed in relation to family social ties (stronger in women) and experiences caring for older persons (higher in women) reported in the survey. Perhaps, these and other experiences are encouraging women to embrace their futures more than they did in the past.

EXPOSURE TO DEMENTIA: CAPTURING STUDENTS' ATTITUDES ABOUT OLDER ADULTS WITH DEMENTIA

L.K. Manning, H.M. Gibbons, *Sociology/Gerontology, Miami University, Oxford, Ohio*

This paper explores and examines the impact of intergenerational interaction between individuals with dementia and college students. A mixed-method study was conducted examining and exploring college students' attitudes toward community service, as well as their attitudes toward working with cognitively impaired older adults. Students in introductory gerontology courses participated in a service-learning course with cognitively impaired older adults for a period of ten weeks. All students in this introductory gerontology course were surveyed to test their attitudes and perceptions of older adults and cognitively impaired older adults prior to service. At the end of twelve weeks, students were given a post-test to assess their level of attitudinal change regarding aging and older adults with dementia. In addition, students were interviewed to further explore their attitudes and perceptions about aging and service learning with cognitively impaired older adults. The findings of this study explore and examine the extent to which exposure to service learning and cognitively impaired older adults changes college students' attitude and perceptions of aging.

ASSESSING ATTITUDES TOWARD OLDER ADULTS: ASSESSMENT OF THE REFINED AGING SEMANTIC DIFFERENTIAL

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PURPOSE: The Aging Semantic Differential (ASD) by Rosencrantz and McNevin (1969) is the most widely used instrument to assess stereotypic attitudes toward older adults. Polizzi (2002, 2003) updated the ASD with current adjectives and reduced the instrument to 24-observed variables for a single latent factor, Attitude (i.e. friendly, nice, patient). Consequently, factors Autonomous-Dependent (i.e. independent, secure, organized, certain) and Instrumental-Ineffective (i.e. productive, busy, active) were removed. We examine the psychometric properties of this

major instrument in an intervention. **DESIGN AND METHODS:** The instrument was administered to 208 medical students (average age 24, 61% female, 63% Caucasian) that participated in a national pilot project, Vital Visionaries, funded by NIA and sponsored by OASIS. Confirmatory factor analysis using structural equation modeling was used. We also gathered qualitative data that captured medical students' stereotypes of older adults. **RESULTS:** The instrument had good internal consistency, Cronbach Alpha of .89. However, SEM indices suggest a one-factor structure to have poor fit. Further, qualitative analysis suggests that medical students evaluated older adults on the two excluded latent factors, Autonomous-Dependent and Instrumental-Ineffective. A general rule of thumb in SEM suggests that three observed variables are needed for one latent factor. Thus, we suggest that the latent factor Attitude can be assessed with fewer observed items, thereby creating room for the addition of the two other latent factors and their associated observed items. The resulting instrument could be just as short but offer a more comprehensive assessment of the stereotypic attitudes toward the aged.

SESSION 270 (PAPER)

TRANSPORTATION

CAN YOU GET A RIDE WHEN YOU NEED ONE? MEASUREMENT OF COMMUNITY MOBILITY SELF-EFFICACY

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Background: When age-associated disabilities or visual impairments in adulthood prevent or limit driving, individuals must arrange personal transportation to support community mobility. Although community mobility for a variety of purposes is essential to independent living, no known measurement strategy taps self-reported confidence, or self-efficacy, in arranging rides for common specific purposes. **Objective:** We report on the development and psychometric properties of a new multi-item community mobility self-efficacy (CMSE) measure for use as a research and evaluation tool. **Methods:** We developed the CMSE measure as part of a larger study evaluating effects of subscribing to the Independent Transportation Network®, an automobile-based, demand-response transportation service, on older adults and younger adults with visual impairment in five U.S. communities. Subjects were asked items in telephone interviews about degree of confidence in arranging rides for purposes including grocery shopping, medical appointments, social activities, and to "go somewhere at night or after dark"; item confidence was reported on a 1-10 scale. **Results:** 75 subjects completing 8 CMSE items are included (83% female; mean age=76+13.3 years; >90% White). Item means ranged from 5.0+3.0 for arranging rides at night to 7.4+2.7 for arranging medical appointments. Internal consistency of the 8 items was high (Cronbach's alpha=0.93) and a single factor solution was obtained. Total CMSE score mean was 52.7+19.3. Mean scores for current drivers (58.4) and non-drivers (49.7) differed considerably ($p=.06$). **Conclusions:** The CMSE measure shows promising psychometric properties and could be used as an outcome measure among older driving-impaired or non-driving individuals exposed to alternative transportation options.

AGING AND DISABILITY AWARENESS TRAINING FOR DRIVERS OF A METROPOLITAN TAXI COMPANY

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With the population of those 50 and older expected to double by the year 2030, and many aging with disabilities, it is clear that transportation for seniors is an important issue. As age increases and health status declines, elders seek alternatives to driving in order to maintain their

connection with the community, socialization, and regular doctor visits. Of those seniors no longer driving, 19% report using public transportation and 10% using taxi cabs (AARP, 2002). In the US, 84% of older individuals report one or more incidents of ageism (Palmore, 2004). With the increasing need for public transportation among seniors, and the prevalence of ageism, it is important that public transportation companies are educated in how best to serve seniors and those aging with disabilities. A scholarship received from the National Center on Senior Transportation allowed the development of a training program to address the educational need of local taxi drivers. The Aging and Disability Awareness Training (ADAT) program was developed for drivers of Louisville Transportation Company in Louisville, Kentucky. ADAT consists of three training modules, provided over 3 separate one and a half hour sessions, using learning methods noted in the research as most successful in promoting disability awareness. Master's level occupational therapy students in the Auerbach School of Occupational Therapy, as an experiential learning component of a course on Aging and Community Practice, along with the project director, provided these trainings. Pre-test, post-test measures along with a course evaluation were used to determine training effectiveness.

MAPPING THE OLDER DRIVER EVALUATION PROCESS: A PILOT STUDY OF TRANSPORTATION OPTIONS AND COMMUNICATION

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Driving is such a powerful symbol of independence, driving retirement can be a difficult and emotional discussion for older people. Typically, any communication about alternatives to driving takes place at the end of the driver evaluation process if it is determined that the older person can no longer drive. Researchers conducted a pilot study to document the older driver evaluation process with a focus on how alternative transportation might impact the older adult's transition from driving. They interviewed seven driving evaluation specialists in Maine and gathered data from one physician from July-December 2008 during routine physical exams of 16 patients (9 male, 7 female; 67-89 years); from two occupational therapists from October 2007-June 2008 during driving evaluations of 18 patients (14 male, 4 female; 61-91 years); and from one classroom driving instructor during 10 Mature Operators classes from October 2007-April 2008. Occupational therapists, physicians, and driving instructors incorporated alternative transportation information into their routine driving evaluation and documented those discussions using uniform reporting forms. In-depth interviews were conducted with each evaluation specialist before and after alternative transportation information was incorporated into their driving evaluation. Researchers found that the driving evaluation specialists discussed transportation alternatives more often and earlier than they did prior to the intervention, that older drivers are more receptive to the discussion when it occurs early in the process and before they are told they must stop driving entirely and that the presence of a family member provides support and facilitates the transportation plan the evaluation specialist recommends.

WELL-BEING AND MENTAL HEALTH

RELIGIOSITY AND PSYCHOLOGICAL WELL-BEING AMONG ASIAN AMERICAN ELDERS

A. Mui, E. Lee, I. Mui, *Columbia University School of Social Work, New York, New York*

This study examines the association among religiosity, depressive symptoms, and life satisfaction in a regional probability sample ($n = 305$) of three groups of Asian immigrant elders (Chinese, Indian, and Korean) in the East Coast. Findings suggest that 100% of the sample were immigrants, their mean age was about 73 years, and approximately 85% of them reported an affiliation with an organized religion. The study found support for the importance of religion within the Asian immigrant communities, as a majority of surveyed Asian immigrant elders believed that religion was very important in their lives. Data also suggest that religion was a powerful spiritual coping resource for them. Multiple regression analyses indicated that the Asian immigrant elderly respondents' sense of religiosity was associated with a lower level of depressive symptoms and a higher level of life satisfaction. The link between religiosity and depression suggests that most immigrants continue or rebuild their spiritual lives in the new country. Religious interpretation of stressful life events may have power to bring believers to a state of inner peace or acceptance of a situation beyond their control and stressful life events associated with aging process. The finding points to the importance of carefully considering the spiritual needs of Chinese, Indian, and Korean and other Asian elderly populations when planning social and mental health support services.

THREE DIMENSIONS OF PROMOTING VITAL INVOLVEMENT (PVI)

H.Q. Kivnick, R. Kilabera, *University of Minnesota, Minneapolis, Minnesota*

Vital Involvement Practice is an approach to direct practice with elders, in which the goal of intervention shifts away from accomplishing a particular task for the elder client. The goal becomes supporting the elder to experience a meaningful daily life – including exercising personal strengths, engaging in mutually satisfying relationships, and intentionally contributing to others. The essential “atom” of Vital Involvement Practice is the construct of vital involvement (VI), i.e., meaningful engagement with the world outside the self (Erikson et al., 1986; Kivnick & Stoffel, 2005). Vital involvement is enacted whenever a person participates in meaningful activity or interaction with any element(s) of the environment. The “molecule” of Vital Involvement Practice is an instance of Promoting Vital Involvement (PVI) – in which a practitioner takes some action that enables an elder to engage in vital involvement. The researchers collected 155 written reports of PVI instances, personally practiced or observed, from staff in a sixty-bed ALF. Using a thematic analytic strategy derived from the grounded theory approach to qualitative analysis (Corbin & Strauss, 2007), the researchers have identified three separate dimensions of PVI instances: Intricacy; Inertia; Time span. These dimensions help clarify the interpersonal dynamics of promoting vital involvement. Their internal variabilities offer the possibility of greatly enhanced understanding of such practice aspects of PVI as staff training and supervising; facility design; client training and participation; client outcome. The poster exemplifies PVI instances, describes the conceptual structure of each dimension, and illustrates different positions on each dimension's range of variability.

EMBODIED GENDERED AGEING: ON (AGE) CODED BODIES

C. Krekula, *Dept. of Social Studies, Karlstad University, Karlstad, Sweden*

In this paper I will discuss how embodied experiences construct gendered conditions for healthy aging. The data consist of three focus group

interviews and twelve individual interviews with women in ages 70 years and older. I will draw attention to a body-related paradox on old women's relation to their bodies. On the one hand, we have the assumption that women's aging is influenced by beauty norms that praise youth, and on the other, studies showing that older women's attitudes towards their bodies are far more positive than has been suggested. I will illustrate the presence of double bodily dimensions, that are used to a greater or less extent in performances of identities. I will also discuss the body as a process interpreted over time and space and double perspectives on bodies, e.g. the presence of many different reference groups. Analyses with the concept of age coding – practices of distinction that are based on and preserve representations of actions, phenomena and characteristics as associated with and applicable to defined ages – shed the light on how individuals take advantage of manifold and ambivalent norms and reference groups in order to construct embodied gendered aged identities.

DIMENSIONS OF RELIGIOSITY: IMPACT ON DEPRESSION AMONG LOW INCOME PERSONS WITH DIABETES

S.M. Cummings¹, B. Kilbourne², *1. Social Work, University of Tennessee, Nashville, Tennessee, 2. Tennessee State University, Nashville, Tennessee*

Persons with diabetes experience depression at a significantly higher rate than do their non-diabetic counterparts. The stress process model posits that chronic and acute stressors (e.g. chronic illness) and various protective factors, such as social support, influence psychological status (Turner & Lloyd, 1999). Measures of religiosity have also been incorporated into this model as protective resources. Religiosity, however, is a complex construct containing multiple dimensions. Scholars have called for a systematic examination of the separate roles that various dimensions of religiosity play on individuals' mental health and health functioning (Idler et al., 2003). The purpose of this research study was to examine the impact of multiple dimensions of religiosity on depression among a lower income population of persons with diabetes. Employing a cross-sectional design, the study focuses on a sample of diabetics from low-income neighborhoods ($n=222$). The majority was African American. The impact of five distinct dimensions of religiosity (religious belief, religious reading, prayer, religious attendance and religious discourse) on depressive symptoms was analyzed. Hierarchical linear regression revealed robust and inverse associations between four out of five dimensions of religiosity and depression. Prayer ($b = -3.49$, $B = -0.15$), religious reading ($b = -0.96$, $B = -0.15$), religious attendance ($b = -1.31$, $B = -0.17$) and religious belief ($b = -0.42$, $B = -0.21$) proved protective against depressive symptoms. The analyses suggest that religious resources increase psychological resiliency among those managing the chronic stress of diabetes. Pedagogical and practice implications are discussed.

ASSESSING INTERPERSONAL TRAUMA IN OLDER WOMEN

C.L. Bright¹, S.E. Bowland², *1. University of Maryland, Baltimore, Maryland, 2. Social Work, University of Louisville, Louisville, Kentucky*

Interpersonal traumatic experiences (childhood abuse, sexual assault, and intimate partner violence) are common in older adult women and associated with negative short-term and long-term health and mental health outcomes. Thus, assessing trauma symptoms is essential to providing adequate services. This paper describes the Posttraumatic Diagnostic Scale (Foa, 1995), the challenges of measuring trauma in older women, and reports data about the appropriateness of this instrument for use in this population. The data was drawn from a small sample of adult women ($n = 33$) who took the PDS as part of a larger intervention study. Symptom severity scores are examined and discussed, as they did not consistently reflect the experiences of the sample. Eschewing a clinical interview to assess the impact of interpersonal trauma in older adult women may be a mistake.

THOUGHTS OF SUICIDE OF ELDERLY : MEDIATING EFFECT OF DEPRESSION AND MODERATING EFFECT OF SELF-ESTEEM

E. Park, S.U. Kim, *Yonsei University, Seoul, Korea, South*

As Korea is undergoing rapid demographic change where there are more elderly than ever before, percentage of elderly committing suicide has reached a critical level. Following the trend where elderly is moving to small and medium-sized cities, this research, with the aim of increasing the quality of life for elderly living in cities, examines the elements that can prevent suicide. This research used “an examination on the actual condition of depression of elderly and thoughts of suicides,” a study conducted in January 2009 targeting 800 (over 50 of Seongnam city in Korea). DV was thoughts of suicide and measured using Suicidal Ideation Questionnaire (SIQ) scale. IVs were social activity involvement level, abuse level, IADL level and economic satisfaction. MV was depression level and for moderating variable, self-esteem. CVs were gender, age, education, religion, marriage status, type of household, residential type and length of residence. We used SPSS 12.0 Package and performed multi-regression. First, the result concerning mediation effect of depression level, we found that length of residence, IADL level, abuse level, and economic satisfaction had direct influences on thoughts of suicides and, whereas, higher the level of depression, the higher the frequency of suicide thoughts, verifying the partial mediation effect of depression level. Second, the result concerning moderating effect of self-esteem, IADL level, abuse level and economic satisfaction had direct influences on thoughts of suicides, and as interaction of self-esteem and economic satisfaction caused reduction in the frequency of suicide thoughts, it verified the moderating effect of self-esteem.

SESSION 277 (SYMPOSIUM)

NIA SYMPOSIUM: WHERE RESEARCH COMES OF AGE - ADVANCES, INITIATIVES & TRAINING OPPORTUNITIES

Chair: *R.J. Hodes, National Institute on Aging, Bethesda, Maryland*

Discussant: *J. Harden, National Institute on Aging, Bethesda, Maryland*

This interactive symposium will provide an overview of recent research advances to include creative strategies for healthy aging, initiatives, funding and training opportunities at the National Institute on Aging. The NIA conducts and supports biomedical and behavioral research with a focus on understanding basic processes of aging, improving prevention and treatment of diseases and conditions common in later years, and improving the health of older persons. The NIA also supports the training and career development of scientists focusing on aging research and the development of research resources. This symposium is devoted to interactive roundtable discussions with leaders and representatives of relevant NIA divisions. Participants will have an opportunity to comment on research goals, training activities, and other related topics.

NIA SYMPOSIUM: CREATIVE & INTERACTIVE ROUNDTABLE DISCUSSIONS ON AGING

R.J. Hodes, J. Harden, F. Sierra, E. Hadley, R. Suzman, M. Morrison-Bogorad, C. Hunter, R. Barr, *National Institute on Aging, Bethesda, Maryland*

This interactive symposium affords participants the opportunity to interact with the leadership and staff of NIA extramural research divisions. The round-table discussions may focus on latest advances in research at the NIA, career development plans and issues, questions about review, and pre/post award management. Participants may prepare a one-page abstract to discuss and leave with staff for follow-up or use the time for mini-mentoring sessions as many of the leaders in extramural research communities attend this symposium. We anticipate attendance by NIA's current and last two full-time Deputy Directors: Dr. Marie Bernard, Dr. Terrie Fox Wetle and Dr. Judith Salerno. The NIA conducts and supports biomedical and behavioral research with a focus on understanding basic processes of aging, improving prevention and treatment of diseases and

conditions common in later years, and improving the health of older persons. Come join the fun and talk about creative next steps in your career.

THE CHANGING LANDSCAPE AT NIA: NAVIGATION AIDS FOR GRANT APPLICANTS

R. Barr, *National Institute on Aging, Bethesda, Maryland*

The National Institute on Aging (part of the National Institutes of Health and of the Department of Health and Human Services) continues to offer a range of programs and grant opportunities tailored to students and investigators across a broad range of research fields. Human resource priorities include particular consideration for Early Stage Investigators while scientific priorities are captured in initiatives published in the NIH Guide. Although these priorities do help to shape the directions of research on aging, most of our funding is for investigator-initiated applications that compete well in peer review. Against this relative constant of funding opportunities, NIA, as part of NIH, has participated in several Recovery Act initiatives, is reshaping how peer review is conducted, and is changing the length and structure of applications submitted. These changes will be detailed in this presentation, and guidance will be provided on how and when to submit applications for funding consideration. The presentation will also identify all open competitions for research funds in which NIA is a primary sponsor.

SESSION 280 (SYMPOSIUM)

GRECC SYMPOSIUM: SKELETAL MUSCLE REGENERATIVE FUNCTION IN AGING AND DISEASE

Chair: *M.M. Bamman, GRECC and Physiology and Biophysics,*

Birmingham VA Medical Center and University of Alabama at Birmingham, Birmingham, Alabama

Sarcopenia, which results from motor unit loss and type II myofiber atrophy, is a universal consequence of aging. The onset and progression of sarcopenia among old may largely result from age-related impairments in muscle regenerative capacity—a widely known phenomenon that has been demonstrated with advancing age in both human and animal model systems. Regeneration impairment is a significant problem for veterans transitioning toward frailty or attempting to recover from joint repair/replacement surgery, as muscle atrophy is exacerbated in these patients and they are unable to restore muscle mass to pre-surgery levels despite intensive physical efforts. Further, disease states such as cancer, rheumatoid arthritis, HIV, COPD, and diabetes compound age-related atrophy by inducing varying degrees of muscle metabolic dysfunction and cachexia. The goal of this symposium is to provide the attendee with an overview of cellular and molecular mechanisms causing muscle regeneration impairment with increasing age in both healthy and diseased. Dr. Richardson will begin the symposium by describing the metabolic and angiogenic limitations of aging muscle to a standardized stress (i.e. endurance exercise). Dr. Dennis will then describe components of the aging muscle transcriptome that may be important indices of the muscle's ability to adapt to exogenous stress or damage. Dr. Clemens will discuss key molecular processes controlling muscle atrophy during cancer cachexia as well as a novel treatment strategy. Dr. Bamman will close the session with a discussion of satellite cell (SC) function during muscle regeneration and key factors that influence SC function in aging muscle.

MOLECULAR PATHOGENESIS OF AND NOVEL TREATMENT APPROACHES TO CANCER CACHEXIA IN MURINE MODELS

P. Clemens^{1,2}, P. Sae-Chew^{1,2}, G. Niizawa^{1,2}, *1. VA Pittsburgh Healthcare System, Pittsburgh, Pennsylvania, 2. University of Pittsburgh, Pittsburgh, Pennsylvania*

Cachexia accounts for 40% of morbidity and 20% of mortality in cancer patients. In a novel mouse model of cachexia induced by PC-3

prostate adenocarcinoma cells in BALB/c nude mice we observed weight loss, a 50% reduction in muscle weights and decreased muscle fiber diameters. Elevated levels of activated nuclear factor of κ B (NF- κ B) were found in tibialis anterior and quadriceps muscles, but not in gastrocnemius muscle. In contrast, elevated levels of the phosphorylated eukaryotic initiation factor 2 α in gastrocnemius muscle suggested a greater component of cachexia was due to decreased protein synthesis in this muscle. The I κ B superrepressor (IkBSR) and the cellular caspase-8-like inhibitory protein (cFLIP) genes decreased NF- κ B activation and prevented inhibition of muscle cell differentiation induced by cancer cells in vitro. Delivery of these genes by adeno-associated viral vectors to murine cachexia models in vivo show potential to ameliorate cancer cachexia in a murine model.

MUSCLE GENE EXPRESSION IS STRONGLY CORRELATED IN OLDER ADULTS WITH RESISTANCE TRAINING OUTCOMES

R.A. Dennis^{1,2}, H. Zhu³, P. Kortebein^{1,2}, H. Bush³, J. Harvey², D.H. Sullivan^{1,2}, C. Peterson³, 1. GRECC, Central Arkansas Veterans Healthcare System, North Little Rock, Arkansas, 2. University of Arkansas for Medical Sciences, Little Rock, Arkansas, 3. University of Kentucky, Lexington, Kentucky

The loss of muscle mass and strength during aging may be greater for individuals whose muscle has a diminished ability to adapt to physical demands. In order to identify candidate genes involved, quantitative mRNA analysis compared muscle of young and older adults pre and post-acute resistance exercise. Differences were seen for genes that function in tissue inflammation, growth, and remodeling. Older adults (N=8, 68 \pm 6yrs) then participated in resistance exercise training to determine if expression of the candidates was related to training outcomes. Strength gain was correlated ($P \leq 0.003$, $R \geq 0.89$) with baseline levels of insulin-like growth factor-1, matrix metalloproteinase-2, and ciliary neurotrophic factor. These results suggest that key genes in muscle can convey an adaptive advantage to certain older adults. Their function in muscle remains to be determined; however, these genes hold promise as predictive markers of training outcomes that may enable more effective design of exercise programs for older adults.

ROLE OF SATELLITE CELLS IN AGE-RELATED MUSCLE REGENERATION IMPAIRMENT

M.M. Bamman, GRECC and Physiology and Biophysics, Birmingham VA Medical Center and University of Alabama at Birmingham, Birmingham, Alabama

There is general consensus that the complex array of coordinated activities guiding developmental myogenesis—principally muscle progenitor cell (satellite cell, SC) recruitment and net muscle protein synthesis—is largely recapitulated during postnatal muscle regeneration. Identifying key mechanisms that disrupt one or both of these processes in aging muscle is essential to improve regenerative responses among old. The focus of this presentation will be on age differences in SC function during muscle regeneration following damage and during muscle “re-growth”. SCs are influenced by a host of locally expressed factors as well as endocrine factors; thus both will be discussed. Conclusions presented will be drawn from studies on humans as well as lower animals, while highlighting key similarities and differences between model systems.

SESSION 285 (SYMPOSIUM)

NONHUMAN PRIMATES: THE LEADING TRANSLATIONAL MODEL FOR INVESTIGATIONS INTO THE BIOLOGY OF HEALTHY AGING

Chair: K. Kavanagh, Pathology, Wake Forest University, Winston-Salem, North Carolina

Discussant: J.G. Herndon, Yerkes National Primate Research Center, Atlanta, Georgia

Old world monkeys are closely related to hominoids (humans and apes). This symposium will explore the potential of these primates to serve as a translational model for human aging research. Participants will discuss programming of late-life behavior and biology, the effect of age on herpes viremia, age-related metabolic derangements, changes in cognition and physical functionality. Few animal models provide opportunities to evaluate such diverse endpoints. Primate models of human aging are superior to rodents based on their genetic and biologic similarity. Comorbidity patterns in aging monkeys closely mirror that seen in humans including the spontaneous development of diabetes, hypertension, pancreatic and neurologic amyloid deposition and atherosclerosis. These are not seen in rodents without genetic manipulation, which typically is monogenic in contrast to the polygenic nature of these diseases in people and monkeys. Other advantages of monkeys include a larger size that allows more assessments; characteristics and functional sequelae of disease replicates that seen in humans; reproductive systems that model sex differences in disease development or expression; a developed central nervous system; complex social systems; and an omnivorous nature and physiology. Specific advantages of using primates to investigate aging biology and interventions includes the availability of pedigree in many colonies which allows heritability and gene-environment interaction calculations, the ability to experimentally control exposures, and cognitive assessments of complex behavior and memory. As aged primates are becoming more available for such investigations, researchers can both understand and test creative solutions to promote health during the aging process.

AGING AND COGNITION IN MONKEYS, APES, AND PEOPLE: IMPLICATIONS OF EVOLUTIONARY THEORIES OF AGING

J.G. Herndon, Yerkes National Primate Research Center, Emory University, Atlanta, Georgia

Is the long lifespan of *Homo sapiens* explained by the societal and medical progress of the past century, or is it the result of an evolutionary selection process? One idea supporting the latter view is the “Grandmother Hypothesis.” Originally proposed as an explanation of menopause, this construct has been revised to explain humans’ extreme longevity. Data from our lab suggests that long post-menopausal life is a uniquely human trait. Cognitive traits such as language and social cognitive functions may have evolved as mechanisms to compensate for age-related decline in our species in particular. This has significant implications for research in which nonhuman primates are considered as models of human cognitive aging; it also means that some processes can be studied only in humans.

A PRIMATE MODEL OF PHYSICAL FUNCTION

C.A. Shively, T.C. Register, S. Kritchevsky, J.J. Carr, J.R. Kaplan, M.J. Jorgensen, A.J. Bennett, Wake Forest University, Winston-Salem, North Carolina

Decline in physical function is a prevalent multi-system process involving changes in physical activity, and fat and muscle mass and function. Understanding the factors which lead to physical decline is essential to reducing health care costs and improving quality of life in later years. Heterogeneity of populations, and constraints on the number and type of assessments that can be done in older adults hamper our understanding of this problem. An appropriate animal model would

greatly enhance controlled studies of the factors that contribute to physical decline. A series of studies are underway with the goal of developing and validating a nonhuman primate model of functional aging. The model includes a battery of tests to evaluate body composition and physical mobility and function in old and young adult monkeys. Preliminary data from these studies describing measures of physical functioning in monkeys and their relation to body composition will be presented.

T CELL SENESENCE RESULTS IN PERSISTENT SIMIAN VARICELLA VIRUS INFECTION IN AGED RHESUS MACAQUES; A MODEL FOR HERPES ZOSTER

I. Messaoudi¹, A. Barron¹, M. Wellish², F. Engelmann¹, S. Wong¹, D.H. Gilden², R. Mahalingam², 1. *Oregon National Primate Research Center, Beaverton, Oregon*, 2. *University of Colorado Health Sciences, Denver, Colorado*

Herpes zoster (HZ, shingles) is caused by the reactivation of latent varicella zoster virus (VZV) and causes significant morbidity and sometimes mortality in the elderly. The immunological deficiencies that result in HZ remain poorly understood since VZV infection of laboratory animals does not cause disease. Our studies show that inoculation of rhesus macaques with the closely related simian varicella virus (SVV) accurately recapitulates VZV infection in humans including: generalized varicella; the development of cellular and humoral immunity; and the establishment of latency in sensory ganglia. More importantly, whereas adult rhesus macaques resolve acute SVV infection, aged animals remain persistently viremic. Whereas the SVV-specific antibody response was comparable in adult and aged animals, the SVV-specific T cell response in aged animals was delayed and reduced in magnitude. Thus, similar to clinical observations about VZV, the inability of aged animals to control SVV viremia is due to a reduced T cell response.

DIFFERENTIATING THE AGING VS. PREDIABETIC TRAJECTORIES IN MIDDLE-AGED/AGING NON HUMAN PRIMATES

B. Hansen, *University of South Florida, Tampa, Florida*

Diabetes and cardiovascular disease are preceded by a long prodrome of metabolic changes that are early manifestations of the developing diseases. Some of the features of this longitudinal transition period, when clustered together with increased adiposity, have been termed the Metabolic Syndrome, and include the earliest changes in glucose tolerance, insulin resistance, dyslipidemia, and sometimes hypertension. Additional features should also be considered to be part of this period of progressive disease development. The longitudinal trajectories of each feature in non human primates, maintained under environmentally constant conditions, clearly separate them as diseases of aging, separable from normal processes of aging. When defining the characteristics of aging per se, it is important to identify such disease related trajectories and their characteristics that are associated with but not part of normal aging processes.

TRANSLATIONAL STUDY OF THE CONSEQUENCES OF EARLY LIFE IMPOVERISHMENT ON HEALTH ACROSS THE LIFESPAN

A. Bennett¹, P.J. Pierre¹, C.J. Lees¹, W.D. Hopkins^{2,3}, C.A. Corcoran¹, 1. *Wake Forest University Department of Physiology and Pharmacology, Winston-Salem, North Carolina*, 2. *Agnes Scott College, Decatur, Georgia*, 3. *Yerkes National Primate Research Center, Emory University, Atlanta, Georgia*

Childhood impoverishment, stress, and adversity are part of a risk pathway for a broad range of deleterious health outcomes across the lifespan. Understanding how early experiences alter the trajectory of healthy development is critically important to research on human health. Our research uses a long-standing nonhuman primate model of early childhood impoverishment to evaluate the consequences of adversity early in life on health across the lifespan. Our current studies are focused

on the consequences of early impoverishment on neurobiological, behavioral, and cognitive outcomes, as well its role in risk for alcoholism and affective disorders. This animal model can be used to shed light on how early experience alters health trajectories across the lifespan and how we might develop better treatment, prevention, and intervention strategies to promote human health.

SESSION 290 (PAPER)

COGNITIVE AGING IN CONTEXT

AGING SPARES THE ACCURACY OF METACOGNITIVE MONITORING: EVIDENCE FROM A CROSS-SECTIONAL STUDY

C. Hertzog¹, J. Dunlosky², S. Sinclair¹, 1. *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*, 2. *Kent State University, Kent, Ohio*

A cross-sectional sample of 282 adults, ages 18 to 85, participated in a study of cognition and metacognition. We report data on a paired-associate (PA) learning task that included unrelated and related pairs of common nouns. Individuals studied each pair and then gave a judgment of learning (JOL) that rated confidence on a 0-100% scale that the second word could be recalled when cued by the first word in the pair. Polynomial regression analysis showed robust linear age differences in PA cued recall and in JOLs. Both recall and JOLs were influenced by relatedness, with higher actual recall and predicted recall for related items. Relative accuracy (resolution) of the JOLs was measured by intraindividual gamma correlations of JOLs with item recall (failure, success). In the aggregate, increasing age was associated with small but reliable increases in gamma correlations across the adult life span. Older adults' JOLs were sensitive to relatedness, accounting for the small increase in gamma correlations for the entire list. When separated into relatedness classes, gamma correlations for unrelated items were reliably higher than the correlations for unrelated items, but there were no age differences in the resolution of JOLs for either type of item. These findings replicate and extend earlier studies comparing older and younger groups by indicating no age-related decline in the accuracy of monitoring learning across the adult life span, despite age changes in level of PA learning itself.

PROPOSITIONAL DENSITY AND COGNITIVE FUNCTION IN LATER LIFE: FINDINGS FROM THE PRECURSORS STUDY

M. Engelman, E. Agree, *Population, Family, and Reproductive Health, Johns Hopkins University, Baltimore, Maryland*

Introduction: Snowdon et al. (1996) showed an intriguing association between the density of ideas in autobiographies written in young adulthood and Alzheimer's disease. This study re-examines this relationship using an unusually rich source of longitudinal data –The Precursors Study –which follows members of the Johns Hopkins medical school classes of 1948-1964. Data include both recent measures of cognitive functioning and biographical admission essays offering an unprecedented chance to re-examine the hypothesis that early written propositional density is lower for people who develop cognitive impairment. Methods: Forty-one cases with cognitive impairment were identified in the Precursors cohorts. Using cumulative incidence sampling, each case was assigned 2 controls matched on sex and age. Propositional density was assessed using the novel CPIDR 3 (Computerized Propositional Idea Density Rater) computer program (Brown et al. 2008). Adjusted odds ratios were calculated using conditional (fixed effects) logistic regression, maximizing the power of the analysis to detect statistically significant differences in propositional density scores between cases and controls. Results: Average ages at the time of writing and during cognitive assessment were similar for participants in the Nun Study and Precursors Study. Propositional density scores for Precursors Study participants were lower and showed considerably less variation than

scores for the Nuns. Conditional logistic regression did not indicate an association between propositional density and case status. Discussion: Findings from the Nun Study were not replicated in this highly-educated and mostly-male population. Differences in gender and cognitive reserve may explain the discrepant results across the two studies.

SUBJECTIVE MEMORY AS A MEDIATOR OF THE ASSOCIATION BETWEEN AGE AND MEMORY FUNCTION: RESULTS FROM THE ACTIVE STUDY

A.L. Gross¹, J.M. Parisi¹, G. Rebok¹, F.W. Unverzagt², 1. *Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*, 2. *Indiana University School of Medicine, Indianapolis, Maryland*

Age-related declines in memory performance may be attenuated by beliefs individuals hold about their own memory. Findings about this relationship have been inconsistent, however. The present investigation explored the extent to which subjective memory, i.e., self-perceptions about one's memory abilities, mediate the association between age and objective memory performance. Data from the Advanced Training for Independent and Vital Elderly (ACTIVE) trial were used to investigate this question in a longitudinal setting. Community-dwelling, older adults (N = 2,802, M = 74 years of age) were randomized into one of three cognitive training interventions (memory, reasoning, and processing speed) or a no-contact control condition. Participants were administered the Memory Functioning Questionnaire (MFQ), as well as objective memory tasks (Hopkins Verbal Learning Test, Rey Auditory Verbal Learning Test, Rivermead Behavioral Memory Test) at baseline, immediate posttest, and annually at 1, 2, 3, and 5 years. Using a longitudinal autoregressive order-1 structural equation model for participants in the control group, we found that subjective memory was significantly positively associated with objective memory performance prospectively measured 1 year later, and that subjective memory explained a sizable and statistically significant proportion of total effect of age on objective memory. This research suggests that age-related declines in memory performance are mediated by subjective memory beliefs. These results suggest that modifying one's beliefs about their memory may yield changes in objectively measured memory performance, and so incorporating subjective memory components into existing memory training platforms may benefit older adults.

OLDER HUSBANDS' LOWER COGNITIVE FUNCTION AFFECTS WIVES' COGNITIVE FUNCTION OVER 5 YEARS BUT NOT THE REVERSE

W. Strawbridge¹, M.I. Wallhagen², J. Thai², S. Shema³, 1. *Institute for Health and Aging, San Francisco, California*, 2. *University of California, San Francisco, California*, 3. *Northern California Cancer Center, Fremont, California*

We analyzed longitudinal relationships between older spouses' lower cognitive function and the subsequent cognitive function of their partners. We also assessed gender differences as well as the moderating role of marital quality. Subjects were 410 Alameda County Study community-dwelling older couples cognitively capable of completing extensive questionnaires. Baseline cognitive function was measured with a scale assessing problems remembering names, finding the right word, misplacing things, and paying attention. Baseline marital quality was assessed by asking the frequency of marital problems. Cognitive function outcomes were measured 5 years later. Multiple regression statistical models adjusted for partners' own baseline cognitive function, age, ethnicity, and financial problems. We used separate models to examine gender differences, while moderating effects of marital problems were assessed with interaction terms. We found that husbands' lower cognitive function negatively affected their wives' cognitive function five years later, but wives' lower cognitive function had no effect on their husbands' subsequent cognitive function. Marital quality moderated effects for wives – only those in problem marriages seemed to be

impacted by their husbands' cognitive impairment. Thus even apparently mild forms of diminished cognitive function for husbands affect subsequent cognitive function of their wives. The one-way nature of this relationship is consistent with a communication framework. Why the results are limited to wives in baseline problem marriages is puzzling but possibly consistent with a caregiving framework.

COGNITIVE DECLINE IN THE COMMUNITY SETTING: THE IMPACT OF NEIGHBORHOOD SOCIAL AND PHYSICAL DISORDER

P. Clarke, *University of Michigan, Ann Arbor, Michigan*

A growing body of literature has examined factors associated with cognitive function. Findings suggest that education, a marker of "cognitive reserve", can buffer the brain against cognitive decline in later life. A smaller parallel body of work has found associations between community characteristics and cognitive function suggesting that opportunities for activity and interaction in one's local environment may reduce cognitive decline. However, we know very little about the community characteristics that can moderate the negative association between education and cognitive impairment. Using data from the Chicago Community Adult Health Study (2002), we examined the role of the built physical and social environment on cognitive function among adults age 45+ (N=1195). Cognitive function was assessed using 5 items (attention, concentration, long and short term memory, orientation to time). Built environment characteristics were assessed using systematic social observation to independently rate indicators of crime and social disorder in the block surrounding each respondent's residence. Using linear regression we found that cognitive function was negatively associated with advanced age, black or Hispanic, lower education, and lower income. Indicators of neighborhood crime were negatively associated with cognitive function ($p < .03$), but indicators of neighborhood social disorder (e.g. abandoned cars, graffiti, garbage) were only associated with cognitive decline among adults with less than a high school education ($p < .05$). Older adults with more limited "cognitive reserve" may be more vulnerable to cognitive decline when living in neighborhoods characterized by social and physical disorder. Improvements in community contexts may prevent cognitive decline amongst the most vulnerable older adults.

SESSION 295 (SYMPOSIUM)

CREATIVE APPROACHES TO HEALTHY LGBT AGING

Chair: C. Gustason, *University of Massachusetts Amherst, Amherst, Massachusetts*

Discussant: B. Grossman, *University of California, San Francisco, California*

Members of the LGBT community experience unique challenges as they age. Many of these challenges stem from the intersection of aging, socioeconomic status, and the co-morbidities associated with advancing age. Providers are obligated to understand the challenges their LGBT clients face and implement creative strategies to help meet the needs of this population. This symposium will offer a variety of research to inform the practice of multidisciplinary providers who work with this group of elders. Research will be presented exploring the invisibility of LGBT elders within queer and gerontological theories. Challenges associated with one's role as a lesbian or gay step-grandparent will be discussed. Study results indicating how programming preferences of older MSM may differ based upon HIV sero-status will be presented. Health promotion activities and preferences of elder lesbians will be reviewed. Finally, research investigating the creative ways in which MSM deal with aging, prostate health, and prostate cancer will be considered. Please join us for what promises to be an informative, exciting symposium.

THE INTERSECTION OF AGING, SEXUALITY, AND THE PROSTATE: GAY AND BISEXUAL MEN'S PERSPECTIVES

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Because cancer is so age related, all aging persons must deal with its prospect in their lives. For men, prostate cancer is the most common cancer challenge. It is crucial to recognize the diversity of experiences affecting both aging and cancer, including sexual identity. This study focused on gay middle aged and older men's attitudes toward and knowledge of prostate cancer and its treatments. The sample included 36 men (age range 40-70), diverse in terms of race/ethnicity, education, SES, and relationship status, in five focus groups. Even though the discussion was not explicitly focused on aging, considerable discussion addressed the role of aging in how prostate cancer might affect gay men's lives. Specifically, the impact of potential sexual dysfunction was regularly framed as less critical as one ages, while the role of stable relationships in dealing with both aging and prostate cancer in effective and creative ways was emphasized.

OLDER LESBIAN WOMEN – HEALTH PRACTICES AND CHALLENGES TO HEALTH PROMOTION

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This presentation discusses health care practices of older lesbian women and the challenges they face when engaging in activities to promote healthy aging. Eighteen older lesbian women participated in this pilot study. Data were generated through a demographic questionnaire and semi-structured interviews. Conventional content analysis combined with constant comparative analysis method was applied to the interview data. Results show that older lesbian women have many of the same concerns and challenges regarding aging and health as their heterosexual counterparts. These include issues around income, health insurance, access to services, loneliness and social support. However, findings also show that older lesbian women have unique challenges due to their sexual orientation. These findings underscore the need for nurses to be aware that sexual orientation has an impact on health practices and health promotion and work with their clients to develop strategies to alleviate these challenges.

THE SILENCING OF LGBT AGING IN GERONTOLOGICAL AND QUEER THEORY

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The exclusion of lesbian, gay, bisexual and transgender (LGBT) elders from queer and gerontological theories has resulted in the silencing of LGBT older adults and their lived experiences. This silencing has historically left LGBT elders without adequate social or material supports, and isolates them from the LGBT and elderly communities and the human service agencies serving those communities. I define this silencing as a rhetorical move, rendering elders invisible in queer theory and queerness invisible in gerontological theory. I argue that the producers of queer and gerontological theory, from a position of power within these discourses, silence and ignore the rhetorical activities of older LGBT adults. I further argue that, while many LGBT elders have worked for some time to arrange material and social supports for themselves and their peers, their activities have only become audible relatively recently, due to the activism of middle-aged and older LGBT members of human service and academic networks.

EXPLORING PROGRAMS TO BENEFIT MIDLIFE AND OLDER MSM

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This study explores healthy aging program preferences for men who have sex with men (MSM) age 50 and older ($M = 58.15$; $SD = 7.52$). Subjects ($N = 179$) were recruited from San Francisco participants of the Urban Men's Health Study, a probability-based telephone survey. Program formatting (e.g. discussion groups vs. presentations), mentoring (e.g. group or individuals), target population (e.g. only MSM age 50+ vs. everyone), design source (e.g. by professionals), information distribution (e.g. print vs. online media), and content (e.g. social or health concerns) were analyzed based on participant demographics and serostatus (36.3% HIV+). For instance, significant differences ($ps < .05$) were found between HIV+ and HIV- MSM on the likelihood of attending programs that a) chronicle life experiences of 50+ MSM, b) have discussion groups on older MSM concerns and interests, c) presented by professionals, d) utilize group mentoring, and e) designed by gay men of all ages.

THE FAMILY RELATIONSHIPS OF OLDER LESBIAN AND GAY STEPGRANDPARENTS

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Older gays and lesbians remain an invisible minority in society and are underrepresented in literature on aging. Specifically, much of the diversity that exists among the family relationships of lesbians and gay men is overlooked in the academic literature. Given that more than fifty percent of Americans live a portion of their lives in some form of blended family relationship, one would expect gays and lesbians to be part of this experience. However, a discussion of the blended family experiences of gays and lesbians has not been thoroughly examined. Understanding the experiences of lesbian and gay stepgrandparents enables us to better understand the complex nature of blended family relationships. A phenomenological approach of qualitative research was used to interview lesbian and gay stepgrandparents. Eighteen in-depth interviews were completed with older stepgrandparents in two different major metropolitan areas of the United States. All of the participants were in same-sex relationship with a partner who became a parent in a previous heterosexual relationship. The analysis began by the researcher immersing himself in the data. Inductive and deductive coding was used and the researcher established categories from the data. Three of the major themes that emerged are presented. Lesbian and gay stepgrandparents identify three important issues in their family relationships. These three issues include: role and membership ambiguity, familial relationship security, and intergenerational consequences. Themes and quotes are discussed in order for participants to have a better understanding of the family relationships of older lesbian and gay stepgrandparents.

SESSION 300 (POSTER)

DEMOGRAPHY

THE OLDEST OLD IN THE 2000 US CENSUS BY GENDER AND POVERTY STATUS

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This paper will present an analysis of the oldest old, persons who are over the age of eighty-five, based on the 2000 U. S. Census. This unique group, although small, is predicted to grow as a result of increasing life expectancy at age 65. Special issues are presented due to the prevalence of chronic diseases, including Alzheimer's and the risks of loss of mobility, functional ability and independence. In addition this age group has a high risk of a poverty level income as well as the loss

of family, friends, and even adult children. Women's longer life expectancy results in this group being composed of predominantly women. Due to the small numbers as well as the tendency to group these individuals with earlier cohorts of persons in their 70s, there is limited information specifically on this age group. This paper will use the individual data from the U.S. Census of 2000 micro files, analyzed by the author, to provide an overview of the diversity of this group in terms of race and ethnicity, functional ability and living arrangements as well as gender and poverty status. A key objective is to understand the intersection of a functional disability and poverty. Poverty will be discussed both in terms of income poverty, that is income below 125% of the official United States poverty level, and special needs poverty, based on additional income needs of those living alone with a disability. This latter group is predominantly women.

SPATIAL PATTERNS AND SOCIO-ECONOMIC CHARACTERISTICS OF GRANDPARENTS

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Objective: While much work has been done about individual characteristics associated with grandparents who raise grandchildren, relatively little work has been done to examine contextual characteristics that may also affect this. To fill this gap, this study investigates contextual characteristics of grandparents in 50 states. Three specific aims examine (1) a geographical pattern of grandparents who raise grandchildren; (2) whether the geographical pattern is associated with grandparents' county-level socioeconomic characteristics; and (3) whether the associations vary across 50 states. Major county-level characteristics include race, education, poverty, and population density. **Methods:** Using Census 2000, Geographic Information System (GIS) and multivariate spatial regression are employed. GIS explores spatial patterns of county-level socioeconomic variables and grandparents in all 50 states. Spatial regression identifies spatial dependence of grandparents who raise grandchildren by estimating a relationship between the county-level variables and grandparents. **Results:** The GIS findings clearly show that there is an uneven geographical distribution among grandparents. The Spatial regression shows that poverty level and Non-White American status are strong predictors for grandparents who raise grandchildren. However, the estimations of these variables vary in each of the 50 states. **Discussion:** This study addresses the need for a further investigation of why such spatial patterns occur and how contextual level socioeconomic factors contribute to grandparents who raise grandchildren.

REGIONAL DIFFERENCES IN FUNCTIONAL DOMAINS: A COMPARISON BETWEEN GEORGIA AND IOWA CENTENARIANS

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As delay in mortality increases in the oldest-old population, it is expected that more people will become centenarians (Andersen-Ranberg, Schroll, & Jeune, 2001). Although previous research has been presented on regional health differences and mortality rates of centenarians, few studies have focused on depression, activities of daily living, cognitive function, and economic burden. Therefore, there needs to a better understanding of this age group by region. The purpose of this study was to compare centenarians from the Georgia Centenarian Study (GCS, n=239) and the Iowa Centenarian Study (ICS, n=121) on cognitive functioning, activities of daily living (ADL), depression, and economic burden measures. The Georgia and the Iowa centenarians were compared on each item of the four scales of the Short Portable Mental Status Questionnaire (SPMSQ), ADL items, Geriatric Depression Scale (GDS), and five economic burden items using mean scores. Total scores for the scales were also compared using t- and chi-square tests. Results indicate that there were significant differences on several items on the

SPMSQ, ADL items, depression, and economic burden scales. The GCS participants scored significantly lower on the depression total score, significantly higher on ADL items, significantly higher in perceived economic status items; however, there was no significant difference in total number of errors on the SPMSQ. Possible explanation for the differences between the two groups could be selection effects of region, culture, or ethnicity. It is recommended that these variables are further evaluated among centenarians in different geographic regions.

FORECASTING FLORIDA'S LONG-TERM CARE POPULATION THROUGH 2030

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Background: The rapidly increasing long-term care (LTC) demand and cost has been an urgent issue for Florida, the state with the highest percentage of population aged 65 and over. The present study presents a forecast of Florida's publicly subsidized LTC population, with a focus on the adult Florida Medicaid population receiving long-term care service. The study may provide great interest to researchers in LTC cost-effectiveness and the state policymakers. **Methods:** Time-series analysis, more specifically ARIMA modeling, was used to generate the forecasts. Population estimates used age, gender, race/ethnicity crossings at the county-level from the National Center for Health Statistics (NCHS). Medicaid population estimates further used Florida Medicaid claims data and non-Medicaid LTC services assessment data. Overall state estimates were aggregated from county estimates. **Findings:** Florida's aged and disabled adult Medicaid population is projected to see a 6.6% annual growth through 2030, more than three times that of Florida's general population. The long-term care populations include both Medicaid and GR program populations are projected to grow faster than the general population but not as fast as the overall Medicaid population. The growth in home- and community-based services (HCBS) participation mirrors the growth of the overall Medicaid population in Florida. The disabled adult fraction is expected to grow faster than the aged fraction of these populations.

DOES URBAN MIGRATION WITHIN MEXICO RESULT IN BETTER HEALTH FOR OLDER MEXICANS FROM RURAL AREAS?

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The impact of internal migration on health and well-being in later life has received little attention. Understanding the effects of domestic migration, however, is particularly relevant in the context of Mexico's rapidly declining fertility, decreasing mortality, and an almost 50% increase in life expectancy at birth in a little over five decades. Data from the first wave of the Mexican Family Life Survey (MxFLS), collected in 2002, reveal that 41.5% of respondents aged 50+ migrated for at least one year (N=4,762). The dominant migratory pattern has been from rural to urban areas, paralleling Mexico's economic development. T-test results indicate that, among older Mexicans who lived in a rural locality at age 12, domestic urban migrants are significantly more likely to have health insurance: 53% were insured, compared to 32% of their rural peers who never migrated (t= -8.26, N=1,686). Yet, urban migrants also have significantly higher systolic blood pressure and a higher average body mass index (BMI). Finally, OLS regression results do not show statistically significant differences in depression, functional limitations, and self-reported health between urban migrants and non-migrants from rural areas when age, sex, marital status, and education were controlled for. Thus, while domestic urban migration is associated with a greater probability of possessing health insurance among rural-origin older Mexicans, such migration does not translate into later-life health advantages.

THE IMPACT OF POPULATION AGING ON KOREA LABOR MARKET

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According to OECD 2009 Health Data, Korea is already an aging society and will become an aged society in less than two decades. The seriousness of Population aging cannot be overemphasized because it leads to an increase in the number of aged people and a shortage of labor. Coupled with a falling birthrate, this demographic change is likely to have a wide-ranging impact on every aspect of Korean society. This paper is a study on the impact of population aging on Korea labor market by using Korea Labor and Income Panel Data. There has been a wide belief that there is a negative effect of population aging on labor market due to lack of labor force. The results of this empirical study, however, cast two suggestions. Firstly, in the short run, the population aging has a statistically negative effect on labor supply as expected, but in the long run, we confirmed the positive effect on labor force. The reason for that might be thought that the prolonged life year makes the elderly remain in the labor market in order to support themselves and their children. These findings, therefore, show that population aging lead to a mixed effect on labor supply.

PUBLIC VS. PRIVATE SPENDING: WHO'S MORE EFFICIENT IN REDUCING MORTALITY AMONG THE U.S. ELDERLY

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This study analyses how efficient is public and private health spending in terms of reducing the three main causes of mortality among the U.S. elderly. Data comes from the OECD Health Data File 2008 and the NCHS from the CDC statistics. The period analyzed is from 1970 to 2004. The study analyses the patterns on mortality rates and the effect of different measures of expenditure on the main causes of mortality for the 65 years and older American population. To evaluate the efficiency of spending in reducing mortality a production of health model is estimated. This part of the model is established to measure the efficiency of public and private spending in seven different categories of spending. In the second part of the study a dynamic model analyzes a desirable long run rate of mortality for the three most important causes of death. The effect of higher education, life expectancy at age 65, income, and hospital discharges measured as days of care showed a favorable effect on reducing mortality among the U.S. elderly. Public spending has a larger effect on heart disease mortality rate, and private spending has the major effect on stroke and cancer rates. On the second part of the analysis, higher costs are associated with heart disease, and lower costs are associated with stroke and cancer respectively.

WHO CAN AFFORD PRIVATE LONG-TERM CARE INSURANCE?

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Nationwide there are fewer than 7 million long-term care (LTC) insurance policies in force. Why so few? Several explanations have been offered, including the availability of Medicaid, misperceptions that Medicare or other policies cover LTC, beliefs that one's own risk of needing LTC services is small, or desires to simply rely on children and spouses for LTC. This paper explores another possibility – that private LTC insurance is simply “unaffordable” for most older Americans. We begin by investigating the meaning of affordability in the context of private LTC insurance. We propose alternative definitions for affordability, drawing on concepts recently developed to gauge the affordability of acute-care health insurance and housing. Then using nationally representative data from the Health and Retirement Study (HRS) we apply each definition and examine who can and cannot afford LTC coverage among Americans over age 50. We consider definitions based on simple normative standards, such as whether remaining household income after paying LTC premiums is above a reasonable threshold, as

well as ratio definition, such as whether the ratio of premiums to income is less than some target amount. In each case, we take into account the steep positive relationship between LTC premiums and age-at-purchase. This analysis offers an operational framework for defining affordability, insights regarding its relevance as an explanation for non-purchase, and an appreciation for who can and cannot afford private LTC insurance in the U.S. The study builds on and extends earlier research on this subject by the authors.

LONG-TERM CARE PLANNING: INDIVIDUAL RESPONSIBILITY AND LONG-TERM CARE PLANNING BEHAVIOR OF EMPLOYED BABY-BOOM AGED ADULTS

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The population is aging, with the number of elderly expected to climb to 72 million by 2030. Most of these individuals will need some form of long-term care (LTC) at some point in their older adult lives. Our current LTC system is burdensome to state and federal governments, to family members (who provide the bulk of care), and to individuals' pocket books. The system is not expected to endure the weight of the baby boom generation (CWF, 2006). Total national spending for long-term care in 2004 was \$194 billion (GULTCFP, 2007) and is only expected to rise. High cost of private pay services, very limited related coverage under Medicare, restrictive access to Medicaid long-term care services, and changing family patterns beg the question: How will the average American afford LTC care in the near future? This pilot study was conducted using a 77- item survey. This study examines views of benefit-eligible baby-boom aged University employees on individual responsibility for planning/providing/cost of long-term care, whether or not they avail themselves of employer-offered long-term care insurance, and whether or not they save specifically with potential long-term care needs in mind. Preliminary analysis of pilot test results indicate that baby boom aged adults believe individuals have a “great deal” of responsibility for planning, providing, and paying for long-term care. Yet, few are purchasing the employer offered long-term care insurance, and only about half are saving specifically with potential long-term care needs in mind. Full data results expected by summer 2009.

THE EFFECTS OF SENSE OF CONTROL ON THE FINANCIAL SATISFACTION OF OLDER ADULTS

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Older adults are asked to take greater responsibility and control of their financial situation, but often are not equipped to assume that responsibility. This lack of control of one's finances exposes individuals to financial risk in retirement, potentially resulting in insufficient income to maintain an existing standard of living and increasing the current level of poverty among older adults. With origins in social learning theory, a general measure of control was advanced by Rotter (1966). Lachman (1986) augmented the general research on the psychology of control by supporting the use of domain-specific assessments of control in aging research (i.e. control over an aspect of one's life, such as work, finances, or health). Two components of the Health and Retirement Study (HRS), the core survey and a psycho-social leave behind questionnaire (LBQ) in 2006, were used to relate the general and domain-specific sense of control to the financial satisfaction of older adults. Results of this study indicated that there is a spurious effect of sense of control on financial satisfaction. Domain-specific control beliefs have an effect on the financial satisfaction of a stratified segment of the older adult population. As a result, appropriately designed interventions that affect control over one's finances can improve the financial satisfaction of older adults who risk financial insecurity in old age. The results of this study enhance the research on financial satisfaction of the older American population as they face financial challenges in their current and later years.

HIDDEN MEANING? A COMPARISON OF THE DIRECT AND INDIRECT EFFECTS OF BACKGROUND CHARACTERISTICS ON FINANCIAL SATISFACTION ACROSS GENDER

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Previous research has highlighted the significantly different direct effects that income and other predictors of financial satisfaction have for female and male elders (e.g. Danigelis & McIntosh, 2001; Hansen, et.al. 2008). Still unanswered, however, is whether or not the reasons for the overall associations between these predictors and financial satisfaction may differ by gender. This paper uses data from the 1972 – 2006 General Social Surveys (Female N=2,992; Male N=2,276). Our approach is based on a path analytic strategy (see Liang and Fairchild, 1979) complemented by Structural Equation Modeling (SEM) and Ordinary Least Squares (OLS) multivariate regression analysis using difference of slopes comparisons (Hardy, 1993). Financial satisfaction is treated as a latent variable based on questions asking respondents' financial satisfaction (1) in general, (2) over time, and (3) relative to others (Cronbach's alphas > 0.63). The analysis compares background determinants of financial satisfaction for individuals 65+ separately for women and men (model fits are reasonable – e.g. CFI > .900 and RMSEA < .10 for each model). While past and present job prestige and current household income and health operate in the expected ways for both men and women, there are significantly larger direct age, education, and "married" effects for women. Interestingly, most indirect effects are quite similar across gender, although some differences exist: Noteworthy is that household income is more important for men in explaining education's effect on financial satisfaction. Results are discussed in terms of George's (1993) ideas of control and illusion of control and Moen's (1996) life course perspective.

ARE OBESE ELDERS WORKING MORE OR LESS? LONGITUDINAL EVIDENCE FROM THE HEALTH AND RETIREMENT STUDY

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I examine the relationship between obesity and employment in the elderly population. Later-life labor force participation is important for the economic well-being of aging individuals to maintain adequate incomes. Old-age obesity is prevalent and increasing. Obese older Americans are a particularly vulnerable subpopulation and understanding their labor market outcomes is of great relevance to many aging policies. Economic theory provides ambiguous predictions of the effect of old-age obesity on labor supply. On one hand, obesity is a strong biomarker for poor health, and poor health has been found to be associated with reduced labor force participation. On the other hand, obesity and poor health are associated with fewer socioeconomic resources, necessitating prolonged employment or re-entrance into the labor force post-retirement to augment the often low retirement incomes. I focus on white men aged 70-79 using the Health and Retirement Study and multivariate regression analysis with individual fixed-effects to account for unobserved factors that influence health and work decisions. My preliminary results show that the overweight and mildly obese men are about 2.2 (95% CI: -0.002 – 0.046) and 3.5 (95% CI: -0.003 – 0.074) percentage points more likely to work than those with normal weight, amounting to about 10% and 15% increases respectively in their labor force participation rates; and that the severely obese men are nearly 10 (95% CI: -0.237 – 0.037) percentage points less likely to work, equivalent to about 45% reduction in labor force participation. I then explore the potential pathways that may mediate the old-age obesity-work relationship.

SESSION 305 (POSTER)

ELDER ABUSE

DEVELOPMENT AND TESTING OF AN INSTRUMENT FOR ELDER ABUSE SCREENING

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Study purpose was to develop a clinically relevant instrument for use in an emergency department for screening of elder abuse. Yearly, 2.1 million elderly Americans fall victim to abuse. One in 14 incidents comes before authorities. Incidence/prevalence is unclear and underreported. Factors include lack of recognition of signs and symptoms, victim reluctance in reporting, lack of reporting laws, and elderly cognitive impairment. Major barrier to detection is lack of reliable, valid and clinically feasible instruments. Screening instruments should apply to all elders whether chief complaint is related to abuse or not. Study consisted of nonrandom convenience sample of 68 patient's age 65+, who were able to read/write English, and resided with a family member/responsible adult providing assistance with daily living activities. Subjects recruited from a northwest Georgia ER with written informed consent. Instruments consisted of MMSE, Elder Abuse Instrument and Demographic/Clinical Information Form. Subjects were African-Americans, 65-88 years. Mean score for MMSE was 21.4. Internal Consistency for Item to Total Correlations showed 5 of 17 items demonstrated variability within sample (Cronbach's Alpha = .73). 2 subjects reported elder abuse. More variability among the elder abuse items expected if more positive responses to elder abuse were obtained. No variability was found to exist on general questions, physical abuse, sexual abuse or abandonment. Future study would focus on expanding areas of psychological abuse to examine verbal threats, humiliation, harassment, intimidation and social isolation; financial exploitation to examine property, assets and possessions; neglect to examine personal safety, shelter, comfort, and personal hygiene.

INTIMATE PARTNER VIOLENCE AMONG OLDER ADULTS: BRIDGING THE DISCIPLINARY DIVIDE

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With the aging of the baby boom generation, intimate partner violence (IPV) among older adults will likely increase. The limited research findings and publications that address IPV in late life are scattered across a variety of disciplines, often making them difficult to ascertain. The purpose of this project, the initial phase of a multidisciplinary community-based collaboration, was to evaluate the literature on IPV among older adults. Limiting our sample to information published from 1999 to 2009, we used 10 primary terms to search 5 multidisciplinary databases that index scientific journals, web-based resources and professional reports. Within the resultant library of 297 records, we identified 89 entries in the domestic violence (DV) literature that focus on older adults and 24 entries in the elder abuse (EA) literature that explicitly address IPV. Content analyses of these 113 sources revealed frequent use of an ecological framework to guide IPV research, feminist critiques of the caregiver stress model as an explanation of IPV, data collection and pilot program innovations, and methodologically diverse exploration of victim perspectives. We also discerned disciplinary bias and gaps. For example, EA researchers addressed the policies and laws that drive IPV system responses whereas DV scholars dealt with abuse dynamics, services for women, and victim health. To advance understanding of the complex intersection between age and power dynamics in intimate relationships our findings suggest the need for interdisciplinary dialogue to develop future investigations of IPV among older

adults that support more effective risk factor identification, preventative measures, and intervention strategies.

NON STAFF ABUSE OF OLDER ADULTS IN NURSING HOMES: A RANDOM SAMPLE TELEPHONE SURVEY OF ADULTS WITH AN ELDER FAMILY MEMBER IN A NURSING HOME

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Few empirical investigations of elder abuse in nursing homes address prevalence and risk factors of non staff,or resident-to-resident,mistreatment. A random sample of 452 adults with an older adult relative,≥ 65 years of age,in a nursing home completed a telephone survey regarding elder abuse experienced by that older family member. Family member respondents reported that that 16.8% of older adult nursing home residents experienced one or more incidents of non staff abuse during their residence. SEM was used to estimate the importance of risk factors for non staff abuse, including: 1)older adult characteristics, such as demographics(e.g.age,gender)and health status(e.g. diagnosis of dementia); 2)contextual factors, such as the family/older adult relationship(e.g. family member visits to the nursing home,family member satisfaction with the nursing home)and staff caregiver/older adult relationships, including types of staff abuse(e.g. physical abuse, emotional abuse. Statistically significant risk factors were gender,or being a female nursing home resident($\beta=.15$, $t=2.21$, $p=.001$),diagnosis of dementia ($\beta=-0.12$, $t=-1.98$, $p=.001$),family context—family member visits to the nursing home($\beta=.18$, $t=2.45$, $p=.001$)and family member satisfaction with the nursing home($\beta=-.06$, $t=-3.08$, $p=.001$),and staff abuse—physical abuse ($\beta=0.40$, $t=3.47$, $p=.001$) and emotional abuse($\beta=.11$, $t=3.35$, $p=.001$). Findings suggest the value of an ecological or contextual perspective to identifying risk factors and interventions for non staff abuse in nursing homes.

DECISION MAKING IN DETECTING FINANCIAL ELDER ABUSE: A COMPARISON OF PROFESSIONALS IN BANKING AND SOCIAL WORK

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There are growing challenges in the United Kingdom associated with money handling. Although financial abuse of older people is of increasing concern, few professional bodies have guidance in relation to what must be done when financial elder abuse is suspected or detected. Moreover, little is known as to the nature of the cues that lead social workers or banking professionals to suspect financial abuse, or what factors influence the decisions that professionals make in relation to suspicions. The aim of this study is to examine decision making in relation to the detection of financial elder abuse. In this paper comparisons will be made between social workers and banking professionals. There are three phases to this study: Phase I - In-depth interviews, using critical incident methodology; Phase II - Experiments aimed at testing hypotheses about decision making using case scenarios; Phase III - Examination of policy documents. The findings from Phase I will be presented, along with preliminary results from the policy analysis. This project is funded by the UK cross-council research programme, New Dynamics of Ageing.

KOREAN ELDERLY IMMIGRANTS' VIEW OF AND RESPONSE TO ELDER MISTREATMENT: A TYPE-SPECIFIC APPROACH

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This study aims to assess whether and how social and cultural forces influence elderly Korean immigrants' view on and response to four types of elder mistreatment. By using a quota sampling strategy, 124 elderly Korean immigrants were recruited in Los Angeles County, CA. With a

mixed method approach, participants were interviewed with four hypothetical scenarios consisting of physical abuse, financial abuse, psychological abuse and neglect. Also, they were asked (1) whether they perceive each of the four scenarios as elder mistreatment and (2) whether they would seek help in the face of elder mistreatment if described scenarios happened to them. The findings indicate that while a large number of participants perceived the majority of scenarios as abuse, a smaller portion of them actually intended to seek help, particularly in scenarios of financial and psychological abuse and neglect. Age, gender, education, income, years in the U.S. and exposure to elder mistreatment were associated with participants' help-seeking intention, but perceiving a situation as abusive was not necessarily related to help-seeking intention except in the physical abuse scenario. It is critical to understand how each type of elder mistreatment is viewed and responded to by the ethnic minority elderly and to develop a type-specific approach in designing elder mistreatment prevention and intervention programs and policies.

TOCOPHEROL IN ELDER SELF-NEGLECT

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Pathophysiology of self-neglect, the most common form of elder mistreatment, is not well understood. Association between tocopherol and cognitive impairment in older adults prompted us to explore its role in elder self-neglect. OBJECTIVE: (1) To determine whether serum tocopherol levels are associated with elder self-neglect, and (2) to assess the association of serum tocopherol levels and cognitive function in elder self-neglect. METHODS: Serum tocopherol levels were measured in a cohort of 67 self-neglecting elders and 67 matched controls, recruited for the Consortium for Research in Elder Self-neglect of Texas. Pearson's correlation tests were performed to assess bivariate associations between serum tocopherol levels and cognitive function. RESULTS: Mean serum alpha-tocopherol levels were 10.8 +/- 4.7 ug/mL in self-neglect group and 13.0 +/- 4.9 ug/mL in control group ($p=0.006$, unpaired student's t-test). Mean serum gamma-tocopherol levels were 2.0 +/- 1.0 ug/mL in self-neglect group and 2.0 +/- 1.1 in control group ($p=0.83$). Among the self-neglecting elders, no association was found between serum alpha-tocopherol levels and the Mini-Mental State Examination (MMSE) or the Wolf-Klein Clock Drawing Test (CDT) scores ($r=-0.42$, $p=0.75$ for MMSE; $r=0.08$, $p=0.54$ for CDT). No association was found between serum gamma-tocopherol levels and the MMSE or the CDT ($r=-0.12$, $p=0.35$ for MMSE; $r=0.05$, $p=0.68$ for CDT). CONCLUSION: Alpha-tocopherol may be implicated in development of self neglect behavior, affecting the areas of cognitive function not captured by conventional screening. Further research is warranted to identify specific areas of cognitive impairment in elder self-neglect and its relation to alpha-tocopherol.

SESSION 310 (PAPER)

FALLING DOWN AND GETTING BACK UP

VARIATION IN THE RATE OF DIFFICULTY IN IADL AND ADL AMONG OLDER AMERICANS ACROSS COMMUNITIES

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The American Community Survey (ACS), being the nation's largest survey, allows exploration of how the rate of functional disability varies geographically among persons ages 65 and older. The latest data is for the period 2005-2007 and provides a sample of 3.5 million older Amer-

icans living in 2,089 communities. The geographies are essentially counties, groups of counties, or cities with total populations over 100,000 persons of all ages, or larger cities subdivided into populations of about 100,000 persons. Two measures provide proxies for IADL and ADL disabilities respectively. Among older persons living in households, the lowest rate of any IADL or ADL disability is 7.2 percent and occurs in Kansas while the highest rate is 45.4 percent and occurs in New York. Of the 10 areas with the lowest rate of disability, all below 10%, half are in Colorado. Of the 10 highest areas, all above 35%, three are in Texas, two in California, and two are in Michigan. The rate of disability among persons living in households is unrelated to the age distribution of the population (pearson $r=.16$), but the rate of institutionalization is more highly related to age (pearson $r=.45$). This suggests that age, rather than level of disability, is involved in variation in rates of institutionalization across geographic areas.

OLDER ADULTS' ATTITUDES TOWARDS HOME MODIFICATIONS FOR PREVENTING FALLS

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Background – Approximately half of all falls occur in and around the home, and some type of environmental hazard is involved in half of these falls. However, our experience with the difficulty of implementing an intervention to reduce falls with home assessments and exercise led us to explore why older adults might lack interest in simple measures that could reduce falls and potentially prevent injuries. **Methods** – We completed an environmental assessment of participants' homes, and used semi-structured interviews to explore participants' fall history, fall risk, and attitudes toward home modifications and exercise. Interviews were recorded and transcribed. Transcripts were coded line-by-line by three investigators, and analyzed inductively in keeping with grounded theory techniques. **Results** – We interviewed ten individuals ranging in age from 60 to 90. All but one participant fell in the previous year. We identified several themes related to participants' reluctance to modify their homes to improve safety. In general, participants did not see falls as a problem, did not believe that they needed assistance with preventing falls, did not believe that home modifications would prevent falls, and resented others telling them to change their homes. Lack of resources was rarely mentioned. **Discussion** – Our identities may be intricately tied to the places we live. Fall prevention programs must support and reinforce individuals' sense-of-self, even as aging calls into question conventional cornerstones of identity such as home and health. Individuals must feel that they are in control of their activities and environment, and that the program can provide benefits.

RISK FACTORS FOR HIP FRACTURE IN JAPANESE OLDER ADULTS

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Hip fracture is a major cause of disabilities that often leads to loss of independence in older adults. The prevalence of hip fracture in Japan is lower than in Western nations. However, hip fracture incidence in Japan is expected to increase along with the rapidly growing older population. The risk factors of hip fracture in Japanese older adults are understudied, particularly at the population level. Using data from the 1999 Nihon University Japanese Longitudinal Study of Aging, this study examines risk factors of hip fracture separately for men and women reflecting the gender differences reported in the previous studies. Logistic regression was used to model the probability of hip fracture as a function of a number of factors including demographic & socio-economic, medical condition, functional limitation & physical health, life style, and environmental factors. The predictive accuracy was evaluated using the area under an ROC curve (AUC). Significant risk factors for hip

fractures in older Japanese women (AUC=0.70) included: difficulty to bend knee (OR = 1.9), difficulty with ADL (OR = 1.1), diabetes (OR = 1.6) and use of prescribed external medicines (OR = 1.2). Significant risk factors for hip fractures in older Japanese men (AUC=0.66) included: difficulty to bend knee (OR = 2.6), cancer (OR = 1.9) and use of prescribed external medicines (OR = 1.4). The discussion explores the potential reasons why these risk factors are associated with hip fracture while other risk factors in previous studies such as osteoporosis and visual impairments were not.

CHINESE EXERCISE TO PREVENT PARKINSON-RELATED FALLS

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People with Parkinson disease have twice the risk of falls as their age matched peers. Medication and surgery have not ameliorated Parkinson's-related falls, which are characteristic of disease progression, leading to considerable morbidity and mortality. Exercise can improve postural stability and decrease risk of falls. Chinese and allopathic interventions for decreasing falls were reviewed. The purpose of this study was to evaluate the therapeutic effects of Qi Gong exercise on balance and falls for individuals with Parkinson's. A pre-test post-test repeated measures design was used to demonstrate changes in balance score and number of falls after three months of therapeutic Qi Gong. The sample included males and females with Hoehn & Yahr rating scale stage I-IV Parkinson disease who were 55 years old and older. Instruments included the Berg Balance Scale, the Parkinson Disease Fall Profile, and the Mini-Mental State Exam. The number of falls before Qi Gong at evaluation 1 was compared to the number of falls one month after the course of Qi Gong at evaluation 3. The result for the matched pairs t-test for mean number of falls at evaluation 3 (1.53) was less than the mean number of falls at evaluation 1 (4.35), and the difference was statistically significant ($p = .004$). The Berg Balance Scale mean score at evaluation 1 (32.79) was less than the mean score at evaluation 3 (37.06), and the difference is statistically significant ($p = .001$). People with Parkinson disease who participated in Qi Gong significantly decreased falls and improved balance.

A NURSING HOME QUALITY MEASURE FOR SERIOUS FALL-RELATED INJURIES

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Falls among nursing home (NH) residents have serious mortality, morbidity and cost implications, and many are preventable. We demonstrate a method for a new quality measure (QM) for incidence of serious falls-related injuries among NH residents. In a 10% random sample of U.S. NHs, we identified fall-related injuries by linking hospital and emergency room claims over a one-year period; resident risk factors were derived from the Minimum Data Set, and individual time-at-risk was determined as days in the NH during the year. Our analytic sample comprised 1,638 facilities with 38.9 million resident-days at risk. We used a hierarchical generalized linear model for individual injury rates to generate casemix-adjusted expected rates and then computed a facility-level QM as the difference between observed and expected injury rates. To generate an empirical distribution for this QM and identify statistically high- and low-performing facilities, we performed a two-level bootstrapping procedure, resampling both residents within NHs and NHs from our original sample. Overall, 6.6 percent of residents had at least one injury, over an average 160-day NH stay. Substantial variability among facilities persisted after risk-adjustment, with the standardized number of excess injuries ranging from -6.5 to +8.9 between the 10th and 90th percentile. Using the bootstrapped distribution, 5.7% of facilities were identified as poor performers and 3.8% as high performers. This approach shows promise for identifying facilities

with high and low rates of key sentinel events, such as injurious falls, and could be considered for future public reporting and quality improvement initiatives.

SESSION 315 (SYMPOSIUM)

FAMILY DYNAMICS AND INTERDEPENDENCE WITHIN CUSTODIAL GRANDPARENT FAMILIES

Chair: *M.L. Dolbin-MacNab, Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Discussant: *F. Strieder, University of Maryland, Baltimore, Maryland*

Despite continued growth in the number of families in which grandparents are raising grandchildren, the majority of research has focused on grandparent needs and well-being. Yet, grandfamilies are complex family systems that include interactions among custodial grandparents, their grandchildren, and other family members. The purpose of this symposium is to expand the understanding of grandfamilies by considering how grandparent well-being and characteristics of the family context intersect with grandchild adjustment and behavior problems. The paper by Smith and Hancock examines how the quality of grandparents' marital relationship and level of psychological distress mediate the relationship between family contextual factors and grandchild psychological adjustment. Kelley and Whitley investigate how characteristics of the caregiving context, such as caregiver psychological distress, family resources, social support, and quality of the home environment predict grandchild behavior problems. The paper by Dolbin-MacNab examines adolescent grandchildren's behavior problems, analyzes the extent to which custodial grandmothers and their grandchildren agree on the grandchild's behavior problems, and investigates demographic predictors of their agreement. Finally, Hayslip and colleagues examine the role of resilience/hardiness as a potential mediator of the relationship between grandchild-specific caregiving demands and parenting stress as well as the relationship between caregiving role-specific changes and grandparent adjustment. Taken together, the papers in this symposium further the understanding of the dynamic interplay between custodial grandparents, their grandchildren, and the caregiving environment. As discussant, Streider will focus on how findings from these papers have implications for improving the well-being of grandparents and grandchildren alike.

ANTECEDENTS AND CONSEQUENCES OF MARITAL QUALITY WITHIN CUSTODIAL GRANDPARENT FAMILIES

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Although over one half of all custodial grandparents are married, scant research has examined how quality of their marital relationship is linked to key family circumstances. We tested via structural equation modeling an adaptation of the Family Stress Model with data from 193 married custodial grandmother-grandfather (GM-GF) dyads. Consistent with past findings from the parenting literature, it was hypothesized that the linkages between family contextual forces and psychological adjustment of custodial grandchildren would be mediated by the quality of the GM-GF relationship and the level of psychological distress reported by GM and GF alike. The observed data fit the model well for GM (CFI = .95) and GF (CFI = .91), and both the measurement and structural components were largely invariant by grandparent gender. We conclude that assessing the quality of the GM-GF relationship is critical to intervening successfully with custodial grandparent families. [Funded by: R01MH66851]

BEHAVIORAL PROBLEMS IN CHILDREN RAISED BY GRANDMOTHERS: THE ROLE OF THE CAREGIVING ENVIRONMENT

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The purpose of this study was to identify factors in the caregiving environment that predict increased behavior problems in children raised by grandparents. The sample comprised 511 children aged 2 to 16 years, with a mean age of 8.53. The families were predominantly low income, African American, and residing in an urban area. The mean age of the custodial grandmothers was 56 years, with a range of 37 to 80 years. Increased child behaviors problems, as measured by the Child Behavior Checklist, were significantly predicted by six of the eight independent variables, with caregiver psychological distress being most predictive. Other predictors included fewer family resources, less social support, home environments less conducive to child development, younger grandmothers, and fewer grandchildren in care. Interventions focusing on reducing stress in custodial custodial grandparents and improving the economic and social resources needed to effectively raise grandchildren will be discussed.

ADOLESCENTS AND THEIR CUSTODIAL GRANDMOTHERS: AGREEMENT ABOUT GRANDCHILD BEHAVIOR PROBLEMS

M.L. Dolbin-MacNab, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

This study examined the nature of custodial grandmother-grandchild agreement regarding adolescent (ages 11 to 18) grandchildren's behavior problems. Within a sample of 129 custodial grandmother-grandchild dyads, behavior problems were assessed using the Child Behavior Checklist and Youth Self-Report. Grandchildren's behavior problems were significantly worse than normative samples, and 33% of grandchildren and 43% of grandmothers provided borderline/clinical ratings. Granddaughters reported significantly more internalizing and total problems than grandsons. Problem behavior scores were significantly correlated for grandmother-grandson dyads, but not for grandmothers and granddaughters. Granddaughters reported significantly more internalizing and total problems than their grandmothers and the degree of agreement about these problems was significantly worse than for grandmother-grandson dyads. Agreement was not associated with socioeconomic status, grandmother age or marital status, grandchild age, or length of care. Agreement regarding internalizing problems was significantly better for White grandmothers. Findings highlight the need to address grandchild behavior problems, particularly among granddaughters.

RESILIENCE AMONG CUSTODIAL GRANDPARENTS

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The role of resilience/hardiness in mediating relationships between 1) grandchild-specific caregiving demands and parental stress/strain and 2) caregiving role-specific changes and personal adjustment was explored among 240 grandparent caregivers (M age = 58.1; 82% women) who had been raising a grandchild for an average of 6 years. Based upon measures of 1) grandchildren's emotional and behavioral difficulties, 2) parental strain/stress/efficacy, 3) personal adjustment, life disruption, and well being, and 4) resilience/hardiness, hierarchical regression analyses suggested the mediating role of resilience in explaining relationships between child-specific demands and parental stress to be substantial ($p < .01$), but varying somewhat across measures of parenting stress. The role of resilience was also substantial ($p < .01$) in explaining life disruption-personal adjustment relationships; these varied little across measures of adjustment. These findings were confirmed utilizing latent constructs, suggesting that resilience is key to understanding the impact of parental and role demands on grandparent caregivers.

FAMILY I

WHAT ECONOMIC CRISIS?: LATE-LIFE FAMILY RELUCTANCE TO DISCUSS FINANCES

B. Carpenter, E. Sakai, S. Zoller, *Psychology, Washington University, St. Louis, Missouri*

The recent global financial crisis has left many older adults financially vulnerable. Consequently, now may be a particularly important time for family members to talk with each other about their financial resources and plans. We conducted a national U.S. survey of 1,201 adults that addressed their likelihood of talking with family about finances during an upcoming holiday gathering and the perceived barriers to financial conversations. Only 36% thought financial matters would be discussed during the holiday. Of 10 potential conversation topics, respondents thought finances was the least likely to be addressed, far behind expected discussions about health (71%), television (70%), or sports (60%). Common perceived barriers to financial conversations included concerns about privacy and the belief that family already knew what was necessary about their financial circumstances and preferences, despite having had few conversations to date. A substantial number of respondents were uncertain how to initiate financial conversations, were afraid of hurting family members' feelings, or had tried to initiate a conversation but had found their family unwilling. Multivariate analysis suggested that younger, White respondents with fewer financial resources were least likely to have financial conversations with family. These results suggest that late-life family financial conversations are uncommon, yet could be facilitated with targeted educational interventions to enhance communication skills.

A LOOK AT PARENTHOOD AND GRANDPARENTHOOD AS PREDICTORS OF LIFE SATISFACTION

M. Laroco, S. Adams, R. Bryant, *Case Western Reserve University, Cleveland, Ohio*

A myriad of factors are used to assess life satisfaction. However, little research examines predictors of life satisfaction within an aging population. This paper looks at parenting and grandparenting and the impact these roles have on reported life satisfaction. The position of parent and grandparent is pertinent in understanding changing social roles and how this will affect life satisfaction. This study uses data from Wave I of Americans' Changing Lives, which focus on persons in middle and late life. Key assessments will examine reported life satisfaction among parents with varying ages of children. Subsequently, we will measure life satisfaction of grandparents and the roles they play in their grandchildren's life. Eighty-four percent of adults report having children, while 51% report having grandchildren. Fifty percent of parents state being completely satisfied with parenthood; however, life satisfaction and parenthood yielded no significance. Conversely a strong relationship was found between grandparenthood and life satisfaction. Ordered logistic regression was used to examine a multivariate model of overall life satisfaction. The strongest correlates were grandparenthood (OR=.85 95% CI=.77-.95) and marital satisfaction (OR=.44 95% CI=.41-.48). Over half of parents report being satisfied as parents. However, this did not translate to overall life satisfaction. Interestingly, grandparenthood is related to reported life satisfaction. Understanding changing social roles and identifying predictors of life satisfaction will lend much information to parents, grandparents, and policymakers as we better understand population aging and its relationship to social roles.

USING AN INTERGENERATIONAL VIDEO GAME EXPERIENCE TO ENHANCE UNDERGRADUATE LEARNING IN GERONTOLOGY

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A key strategy for successfully teaching undergraduate gerontology courses often involves the selective use of intergenerational curricular activities. This was one rationale for developing a long-term project involving both gerontology and developmental-psychology students and community-dwelling older members (N=15) of a campus-wide continuing-education program. Our main project objective is to gather participants from different generations in a relaxed, informal setting to share a mutual recreational experience (playing Nintendo's Wii video-game) as a way to promote intergenerational communication, while reducing ageist stereotypes. This study addresses the project's impact on students' (N=62) personal perceptions of aging and older people over a semester-long (5-month) interval. Objective and subjective pre-test measures taken at the semester's start showed many students having naïve and myopic views of aging issues and older people. For example, analyses of student narratives showed that their general views of aging and older adults were typically based on societal and media stereotypes portraying the elderly as frail and needy. Students also reported that their intergenerational experiences were mostly limited to grandparent interactions. At semester's end, post-test effect-sizes showed moderate-to-high changes in objective measures (e.g., Fraboni Ageism-Scale). Post-test analyses of subjective measures revealed that most student narratives on aging and older people were now more descriptive, and articulated concrete experiences taken from playing Wii with the older participants to illustrate their views about aging. A few students (21-percent) also reported that they had developed friendships with the older participants that extended to socializing and communication (including Email and cell phones) outside of the project.

THE LONG-TERM IMPACT OF PARENTAL SUBSTANCE USE ON PARENT-CHILD SOLIDARITY IN LATER LIFE

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The present study examined the long-term effects of parental substance use on the domains of parent-child solidarity by using a subsample of 593 parent-child dyads from the Longitudinal Study of Generations (LSOG) who participated between 1985 to 2000/2001 studies. A structural equation modeling technique was utilized in order to construct the mediational models of association of which the final outcome of expressive and instrumental support were examined separately for full sample, parent-daughter, and parent-son dyads. The results revealed an indirect effect of parental substance use/misuse on later expressive support through affectual solidarity among parent-daughter dyads, but not among parent-son dyads. Further, affectual solidarity was the most prominent predictor of later provision of expressive support by adult children, whereas associational solidarity was the most prominent factor for predicting later instrumental support. Findings on the gender difference in the models of association are also discussed.

DOES GENDER MODERATE THE FACTORS ASSOCIATED WITH THE SPOUSE'S ROLE IN CAREGIVER NETWORKS?

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Solo spousal caregiving may be influenced by the spouse's gender, the care recipient's (CR's) and spouse's health, availability of spouse and other caregivers, and sociodemographic characteristics of couples. Using two frameworks, gender perspectives on caregiving and the task-specific model of caregiving, we explored whether and how gender moderated the effects of other factors on solo spousal IADL caregiving. We used a subsample of the AHEAD representative national sample (ages 70+) including couples (381 White and 71 Black) in which the CR

received IADL assistance. Logistic regression tested interactions between gender and variables related to: Health (CR's and spouse's IADLs and ADLs, CR's health conditions and cognitive functioning, spouse's – CR's age); Availability (spousal employment, # of proximate daughters and of sons, poverty ratio, and CR's Medicaid coverage); and Sociodemographic Characteristics (race, years married, and summed ages). As number of CR's IADLs and couple's proximate daughters increased, husbands were less often solo IADL caregivers, whereas these variables did not influence solo caregiving by wives. Additionally, when the spouse was younger or slightly older than the CR, husbands were more likely and wives were less likely to be solo caregivers. Regardless of gender, solo caregiving was reduced by CR's number of ADL limitations and the presence of spousal IADL or ADL limitations. Gender sensitive service provision can be facilitated by identifying circumstances influencing spousal solo caregiving differently in couples with a frail wife and those with a frail husband.

GRANDMOTHER CAREGIVING TO GRANDCHILDREN: EFFECTS OF TIME AND CHANGES IN CAREGIVING RESPONSIBILITY ON SF-36 RATED HEALTH

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A number of studies suggest that grandmothers raising grandchildren have worse health than grandmothers who do not have primary responsibility for grandchildren, but there is limited longitudinal data about how change or stability in caregiving status affects health outcomes. This study used SF-36 (Ware) data to examine the physical and mental health of grandmothers, as grouped according to their caregiving status to grandchildren (165 grandmothers raising grandchildren, 114 in multi-generational homes, and 156 grandmothers not living with their grandchildren) to evaluate the effects of 1) initial caregiving group and 2) increases, decreases or stability in caregiving responsibility over time. This sample of 435 Ohio grandmothers was recruited using random digit dialing with some supplemental convenience sampling. Participants completed three mailed questionnaires one year apart. Data were analyzed using SAS Repeated Measures Analysis of Covariance to examine differences between caregiving groups in the eight SF- subscales and summary physical and mental health scores, controlling for group by time interactions and increases, decreases or stability in caregiving status over 24 months, with additional covariates of age, education, race, marital status and employment status. There were statistically significant differences between caregiving groups in all eight subscales and summary scores, with grandmothers not living with grandchildren reporting better health and well being, with several group-by time effects. Changes in caregiving responsibility affected general health, pain, vitality, and social functioning but not overall physical or mental health. Employment, race and marital status had more limited effects. The implications of these findings will be discussed.

GRANDCHILDREN'S EXPERIENCES WITH CHANGES IN CAREGIVING ARRANGEMENTS

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Transitions in caregiving to grandchildren are increasingly common today as grandparents assume more or less responsibility for grandchildren as parents deal with life issues, e.g., substance abuse, mental health issues, relationship problems or military deployment. Recently studies have examined grandparents' experiences with caregiving changes; however, little attention has been devoted to the grandchild's experience with changes in caregiving and living arrangements. A Hermeneutic Phenomenological approach is being used in this qualitative study to learn about these transitions from the child's perspective. As part of a larger, longitudinal study on grandmother caregivers and family health, semi-structured telephone interviews are being conducted with grandchildren who have experienced a change in caregiving, e.g.,

having a move into or away from the grandmother's home – or having their parent(s) leave or return to the grandparent's home. To date 9 interviews have been conducted with 8 to 17 (M=11.5) year old, white and non-white grandchildren. A modified Giorgi approach is guiding the analysis of the interview transcripts. Data collection and qualitative analysis are ongoing. Preliminary analysis has identified a strong emergent theme of Resilience as children take these caregiving changes in stride and offer advice for other children with similar transitions. In addition, the meanings of these caregiving transitions for the grandchildren are related to the reasons for the transitions. Findings of this study have implications for health care providers and social workers who care for children experiencing family and caregiver changes. The importance and dynamic nature of intergenerational relationships in families will be addressed.

SAFETY VS. AUTONOMY: THE STRUGGLES OF ADULT CHILDREN ASSISTING PARENTS WITH MILD COGNITIVE IMPAIRMENT

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Adult children are likely to become involved as secondary care partners when parents experience mild cognitive impairment (MCI). The purposes of this qualitative analysis were to understand when, why, and how adult children decide to provide more intense support when a parent has MCI and to identify gender similarities and differences in their responses to the new challenges they face. We interviewed 46 adult children (33 daughters; aged 27-65) by phone using semi-structured questions. Analyses revealed perceived risks to parental safety as the main reason adult children stepped in to assist both parents in new ways. Adult children struggled with balancing parental autonomy vs. safety needs. They were uncertain how much to intervene when the parent with MCI developed problems with routine independent living activities such as driving, financial decision-making, household maintenance, medication management, functional limitations, or meal preparation. Sons typically provided indirect support relating to financial planning and household maintenance, laterally supporting parents while focused on promoting long-term independence. Sons also tended to receive information about the elder's condition through the parent assisting the person with MCI. In contrast, daughters provided more direct nurturing support such as daily visits or phone calls to both parents as well as more immediate chores such as grocery shopping and transportation. Findings confirm that gendered patterns of assisting with MCI are similar to those found in other care situations. In this situation, adult children struggle with transitioning into care partner roles and balancing parental independence while actively adhering to safety concerns.

FEASIBILITY OF 24-HOUR URINE COLLECTION TO MEASURE BIOMARKERS IN OLDER CAREGIVERS AND NON-CAREGIVERS

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Neuroendocrine biomarkers are important for understanding the health effects of stress among older caregivers. Most endocrinologists advocate 24-hour urine for these measures; however, there is little information on the feasibility of obtaining 24-hour specimens in community-dwelling older adults. Anticipated challenges include acceptability, fitting collection into participants' schedules, convenience of specimen retrieval, and usability of specimens. As part of an ongoing cohort study of elderly dementia caregivers and non-caregivers living in the Boston metropolitan area, we are collecting a fasting blood sample (for dehydroepiandrosterone-sulfate [DHEA-S] and interleukin-6 [IL-6]) and a 24-hour urine specimen (for cortisol, epinephrine, and nor-

epinephrine). Blood samples are obtained during the participant's interview at a general clinical research center. At the interview, a nurse instructs the participant on the correct method to collect and store a 24-hour urine sample. As incentives, the participant selects a day for urine collection within five days of the interview and receives a \$20 reimbursement; study staff also travel to the participant's home to retrieve the specimen. Through the first 7.5 months of the study, 15 caregivers and 90 non-caregivers enrolled; mean age is 75.6 years; 57% are female. Nearly all participants provided a blood sample (97%) and a urine specimen (98%). The sample medians (interquartile ranges) of the biomarkers measured were: DHEA-S, 54 (28-94) $\mu\text{g/dL}$; IL-6, 4.1 (2.1-5.0) pg/ml ; cortisol, 40 (24-70) ng/ml ; epinephrine, 2.9 (1.1-7.7) ng/ml ; norepinephrine, 39.0 (25.0-60.0) ng/ml . Our high success rate indicates the feasibility of collecting 24-hour urine to measure neuroendocrine biomarkers in an active community-dwelling older population.

A LONG-TERM CARE DECISION-MAKING INSTRUMENT FOR RURAL AFRICAN AMERICAN FAMILY CAREGIVERS

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Few instruments exist that measure knowledge, what role patients want in their own health care and treatment decisions, and who they wish to allocate authority to make decisions for them. Moreover, no long-term care decision-making tools have been developed or adapted for rural persons or African Americans. The purpose of this study was to develop a valid, reliable, and culturally relevant instrument, derived from ethnographic qualitative data, to measure decision-making for rural African American family caregivers and care recipients. Inductively generated data was used to define and operationalize concepts and items. The new instrument was pilot-tested with 60 rural African American families consisting of older care recipients, and primary and secondary caregivers. A participant rating panel of 5 families and a content expert panel of 5 researchers were sought to review the new instrument for cultural relevancy, and item content, style, and comprehensiveness. Psychometric testing is ongoing and includes calculation of: content validity index (CVI) of items across expert scores and the CVI of the total scale, Cronbach's alpha coefficient to determine internal consistency reliability, and stability reliability with a 2-week test-retest and measured with percent agreement, and factor analysis to determine item loadings and subscales. Reliability measurements will be analyzed so that comparisons can be made across the three types of family members (care recipient, primary caregiver, and secondary caregiver). Administering the instrument to care recipients and primary and secondary caregivers will provide insight into how different members in the caregiving family view and participate in decisions.

UTILIZATION OF A COMMUNITY CAREGIVER INTERVENTION PROGRAM: WHO COMES AND WHY?

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Caregiver programs are encouraged to tailor interventions to meet the unique needs of individual clients. Although the literature on caregiving interventions is becoming well established, profiles of caregivers who seek therapy in community settings may differ markedly from those described in research contexts. Thus, an understanding of individuals who seek caregiver services is vital for clinicians who wish to provide caregiving interventions. The present research describes characteristics of 297 caregivers who sought therapy in an established Aging Families and Caregiver Program embedded within a community-based clinic. Two major questions were addressed: (1) Who seeks caregiver family therapy, and (2) What difficulties prompt this decision to seek help. Results show that, unlike many research samples, our clinic draws larger numbers of caregivers who are adult children (61%, $n = 180$) than spouses (31%, $n = 91$). Help is sought at various points throughout the caregiving career ($M = 2$ years, $SD = 27.15$; range: 1 month - 14 years)

and length of treatment varied tremendously based on individual needs ($M = 4$ sessions, $SD = 4.89$; range: 1 - 48 sessions). Moreover, family caregivers are often concerned about navigating important transitions and decision-making (89% of our sample was involved in decision-making for their loved one) in addition to distress and burden. Given that subsamples of caregivers (e.g., adult children vs. spouses) may have distinct concerns and needs, our findings support that service providers embedded within community settings should account for population characteristics when deciding on intervention approaches.

PREDICTORS OF ANTICIPATORY GRIEF IN DEMENTIA CAREGIVERS

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Background: Recent research has demonstrated that anticipatory grief (AG) contributes to the level of burden experienced by dementia caregivers. However, it is unclear what aspects of the caregiving situation prompt the experience of anticipatory grief. **This study examined the relationship between these primary stressors and AG.** It was hypothesized that greater levels of impairments, behavior problems, disease stage, and more hours of weekly care would be associated with higher levels of AG. **Methods:** Eighty dementia caregivers completed a survey related to their caregiving experiences. Regression analyses were used to examine the relationship between primary stressors (disease stage, hours of weekly care, ADL and IADL impairments and behavior problems) and AG. **Results:** Behavior problems were the only primary stressor variable which significantly predicted AG as measured by the Marwit-Meuser Caregiver Grief Inventory ($\beta = .38$, $p < .01$) and the Anticipatory Grief Scale ($\beta = .27$, $p < .05$). Follow-up analyses revealed that disruptive behavior problems were significantly associated with greater AG in spouses, whereas only depression-related behavior problems were significantly associated with AG in adult children. **Conclusions:** The grief experiences of dementia caregivers appeared to be more strongly related to behavioral problems than other indicators of disease severity. However, grief is triggered in spousal caregivers by disruptive behaviors, whereas in child caregivers grief is associated with depression-related behaviors such as crying and tearfulness, suggesting that the experiences which trigger grief may differ between spousal and adult-child caregivers.

INFLUENCE OF PARENTAL ABUSE IN CHILDHOOD ON CAREGIVERS' DISTRESS IN MIDLIFE AND BEYOND

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Research on childhood abuse highlights an intergenerational transfer of violence, influencing how abused individuals treat their offspring. Few have examined if childhood abuse also affects those who are providing care to other family members and friends. Two separate bodies of literature have documented the negative consequences of childhood abuse and caregiving. This study investigated how parental abuse in childhood predicted negative affect and somatic symptoms among 289 individuals aged 33 to 84 (Mean: 55.55), who provided at least one month of personal care to a family member or friend with physical or mental illness or disability in the past year. Data were drawn from the 1995-2005 National Survey of Midlife Development in the United States (MIDUS). Regression analyses revealed significant main effects of parental abuse on physical and psychological distress, after controlling for demographic and other caregiving related variables. Identity of the care recipient significantly moderated the association between childhood parental abuse and current level of negative affect. Parental abuse predicted more negative affect among individuals caring for their parents but not other family members or friends. Results highlighted the lasting influence of childhood abuse on physical and psychological distress in a sample of caregivers, as well as the need to assess adverse childhood family experiences when working with adult children caregivers, in an attempt to reduce their emotional distress.

DEVELOPMENT OF A NEW INSTRUMENT TO ASSESS DEMENTIA CAREGIVER GUILT FOLLOWING NURSING HOME PLACEMENT

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Psychological experiences appear to differ between dementia caregivers pre- and post-nursing home placement. The majority of studies examining caregiver distress following placement rely on community measures of stress and burden (e.g., Zarit Burden Interview). These measures may not, however, adequately capture the post-placement psychological experience. To address this issue, we systematically created a new measure to assess caregiver adjustment following nursing home placement. A total of 46-items were generated and pilot tested with 53 dementia caregivers who were within one month of placement (M age = 60.26, SD = 11.42; 76% female; 66% adult child). Caregivers were also administered other mood and health questionnaires as part of a larger caregiver study. Caregivers were asked to rate their post-placement experience on a 4-point likert scale. Items addressed ambivalence and guilt about the decision to place. The measure was optimized to 21-items by omitting items with inter-item correlations $> .50$. Reliability of the measure was within optimal range (Cronbach alpha α = .80). Construct validity was shown with measures of depression (r = 0.40), perceived burden (r = 0.54), ZBI guilt factor (r = 0.59), and ZBI psychological burden factor (r = 0.48). Divergent validity was demonstrated with measures of social support (r = 0.02), conflict with staff (r = 0.21), and physical health (r = -0.06). Overall, the results suggest that the Caregiver Guilt Questionnaire for Nursing Home Placement is a reliable and psychometrically sound instrument for assessing one aspect of post-placement emotional adjustment in dementia caregivers.

THE DYNAMIC INTERRELATIONSHIP BETWEEN MOTHERS AND DAUGHTERS ON A MEASURE OF DEPRESSIVE SYMPTOMS

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It is important to analyze a reciprocal dynamic relationship between older parents and their adult children. Mothers are generally more invested in their children's lives and the relationship between mother and adult daughter has been shown to have more emotional ties than that between a mother and her adult son. The goals of this study were to longitudinally explore the dynamic interrelationship between mother and daughter on depressive symptomatology, to adjust and examine models taking mother/daughter age differences and education into account, and to develop dynamic structural equation model hypotheses for future research. Mothers (average age = 68) and daughters (average age = 48) from the University of Southern California's Longitudinal Study of Generations were included in analyses (190 total dyads). Depressive symptoms were measured at two time points using CES-D subscale scores. Model fits of varying dynamic cross-lagged regression SEMs were compared using M+ software. The best fitting model suggested an adult daughter's depressive symptomatology to be a leading indicator of her older mother's depressive symptoms (standardized coefficient = .16). Mothers' depressive symptoms did not show any effect on daughters' symptoms over time. Examination of difference in age and education covariates demonstrated that the strength of influence could vary slightly, although not change the relationship or model fit in a statistically significant way. The direction of this adult relationship is different than the unidirectional mother to daughter influence adolescent research suggests. Further analyses will focus on including more time points to explore how the relationship might vary across time.

THE FORMAL SERVICE NEEDS OF GRANDMOTHER CAREGIVERS AND FAMILIES

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The importance of formal service need and use among older adults has been well documented; however, the specific service needs of grandmother caregivers and their families warrant more attention. In the fourth wave of a longitudinal study on grandmothers, caregiving and families, 370 grandmothers, categorized according to their caregiving status (grandmothers raising grandchildren (n =133), grandmothers in multigenerational homes (n =53), and grandmothers living in a separate residence from grandchildren (n =184)), completed mailed questionnaires. The grandmothers were asked to identify services and resources that would benefit them in their current situation; they completed a checklist with sixteen services/resources applicable to many older adults and families, and included resources such as financial, health, legal, and transportation services. Items were summed to create a composite score. ANOVA revealed statistically significant differences between the grandmother groups in service need, with grandmothers raising grandchildren reporting the need for more services (M =3.3, SD =2.8) as compared to the other groups (multigenerational grandmothers M =2.9, SD =2.3; non-custodial grandmothers M =2.1, SD =2.2). Fifty-one percent of the entire grandmother sample indicated the need for services related to exercise and fitness, followed by information on personal health and financial services. Similar patterns were consistent among the specific caregiving groups. The findings underscore that grandmothers raising grandchildren are the group with the most need and demonstrate the challenging and complex nature of this family caregiving situation. Regardless of caregiving status, grandmothers report financial and health services among their greatest needs. The social policy implications for this unique population will be discussed.

A MULTILEVEL ANALYSIS OF CHILDREN'S RESIDENCE IN THREE-GENERATION FAMILIES

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At least 6 million children in the U.S. live in a household that includes a grandparent. For three-quarters of these children, the child's parent also lives in the household, forming a three-generation coresident family. In many of these households, the grandparents serve as primary supports and/or caregivers for their grandchildren, but in others, the grandparent is receiving support and care from the younger generations. Limited financial and other resources are commonly cited as factors leading parents and their children to form three-generation households. Environmental influences, such as housing availability, costs of living, and other spatially-defined factors, have not been examined. In this study we use multilevel regression techniques to examine data from the 2000 Census on intergenerational living. We find that characteristics of the child's parents—specifically, age, gender, marital status, socioeconomic status, work status, and race—are powerful predictors of living in a three-generation household. Characteristics of the community in which the family lives also shape the chances that a three-generation family is formed. For example, living in communities that have a high cost of living promotes the formation of three-generation families. We also identify important differences in the process resulting in three-generation families that are headed by the grandparent, and three-generation families that are headed by the middle generation. Our findings expand conventional explanations of the mechanisms through which grandparent families are formed, and contribute to a greater understanding of why three-generation families are more prevalent in some communities than in others.

THE IMPACT OF THE TAILORED CAREGIVER ASSESSMENT AND REFERRAL PROCESS ON CAREGIVER OUTCOMES: FINDINGS FROM A DEMONSTRATION PROJECT IN THE STATE OF GEORGIA

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Initial findings are reported from a demonstration project undertaken by the Georgia Division of Aging Services and researchers at University of Wisconsin-Milwaukee to implement and evaluate the impact of a caregiver assessment and referral protocol. The Tailored Caregiver Assessment and Referral (TCARE) protocol was designed to enable care managers to more effectively support family caregivers by targeting services to meet their specific needs. It was hypothesized that the TCARE protocol would lead to lower levels of caregiver depression, burden, and identity discrepancy and lower costs of services by altering patterns of service use. A 12-month longitudinal randomized trial was conducted in three regions of the state. Half of the 12 care managers participating in the study used TCARE to serve caregivers who were randomly assigned to the treatment group (n=41) and the other six followed usual practices to serve caregivers assigned to the control group (n=34). A process evaluation documented fidelity with the TCARE protocol. Data were collected at three month intervals. Findings are reported here for outcomes at T2 and T3. Findings from data analyses using hierarchical level modeling (HLM) procedures revealed a significant interaction between group and time on stress burden, depression, and identity discrepancy. Caregivers in the treatment group had lower levels of identity discrepancy, stress burden, and depression at the three and six-month follow-up periods. Similar, but statistically non-significant patterns were found for measures of relationship burden and caregiver uplifts. The findings provide evidence that TCARE is an effective service to support family caregivers.

A TELEPHONE-DELIVERED PSYCHOSOCIAL INTERVENTION IMPROVES DEMENTIA CAREGIVER ADJUSTMENT FOLLOWING NURSING HOME PLACEMENT

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Nursing home placement is a stressful transition point in dementia caregiving. Despite a decrease in caregiver demands, placement does not fully relieve caregiver distress. We examined the preliminary efficacy of Family Intervention: Telephone Tracking-Nursing Home (FITT-NH) for facilitating caregiver adjustment following placement. FITT-NH is a multi-component telephone intervention that was delivered within one month of placement. Caregivers received 10 telephone contacts over 3 months. Treatment strategies were based on assessment of caregiver emotional adjustment, family functioning, staff-caregiver interactions, health, and social support and tailored to ensure individualized application of interventions. Care recipient mood and behavior were monitored. Caregivers (N = 46; M age = 59.20, SD = 10.65; 76% female; 78% adult child) were randomly assigned to FITT-NH (n = 24) or standard care (n = 22) using urn randomization to balance the groups on caregiver gender, relationship type (spouse versus other), and facility type (special care unit versus general). Inclusion criteria included dementia diagnosis, caregiving for at least 6 months, permanent placement, and not designated for hospice care. Outcomes included burden, depression, guilt, staff-caregiver interactions, and health-related quality of life at baseline and 3 months (end of treatment). Caregivers in both groups showed a reduction in perceived burden and depressive symptoms. Caregivers receiving FITT-NH, however, showed fewer feelings of guilt, more positive interactions with staff, and a tendency toward returning to pre-

caregiving activities compared to caregivers receiving standard care. Findings provide preliminary evidence for FITT-NH as a potentially efficacious intervention for improving caregiver emotional adjustment following nursing home placement.

DISCUSSING DEMENTIA-RELATED BEHAVIORS DURING HEALTHCARE VISITS FOR PERSONS WITH ALZHEIMER'S DISEASE

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Behavioral changes are a common symptom of dementia that can create significant burden for family caregivers. Research suggests that caregivers have an active interest in receiving support from healthcare professionals regarding dementia care. Yet, little is understood of how caregivers work with patients' primary care providers (PCPs) to manage dementia-related (DR) behaviors. This study analyzes the discussions of DR behaviors during 25 primary care visits of people with Alzheimer's disease that were co-attended by a family caregiver. We examine whether caregivers who report DR behaviors on an independent assessment, using the Revised Memory and Behavior Problem Checklist (RMBPC), discuss those behaviors with the PCP. Each visit was audio-recorded and coded for the frequency and type of behaviors discussed. DR behaviors were discussed in over 75% of the visits and memory-related behaviors were more often discussed than disruptive behaviors (69.2% versus 23.1%). Discussion of DR behaviors was positively correlated with caregiver report of behavior frequency and behavior-related burden. Although 32% of caregivers endorsed the RMBPC item "waking you or others at night" and 20% endorsed, "engaging in behavior that is potentially dangerous" and "verbally aggressive," none of these symptoms were conveyed to care recipients' PCPs. These findings suggest the need to educate family caregivers on the value of, and approaches to, reporting clinically actionable DR behaviors to PCPs. Implications of findings for ways the PCP can assist the caregiver in behavior management are discussed.

HEALTH BEHAVIORS AMONG FAMILY CAREGIVERS: PREDICTORS OF CHANGES OVER TIME

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It is widely recognized the caregiving can place extensive demands on family members that can lead to an erosion of personal and social resources. Health behaviors are important for sustaining good health in the face of chronic stress, but the time and effort expended on care responsibilities may lead family members to cut down on preventive health efforts such as exercise or to engage in potentially harmful behaviors such as poor diet or use of alcohol. Prior research has used cross-sectional data to examine predictors of health behavior of family caregivers. In this study, we look both at cross-sectional findings as well as predictors of changes in health behavior. The sample consisted of 141 caregivers of persons with dementia who were followed over a 6 month period. Using a regression analysis on baseline data, we found that older caregivers had better health behaviors, and that greater overload and depression were associated with lower health behaviors. Surprisingly, care stressors such as behavior problems and emotional support were not related to health behavior. At 6 months, about half the sample showed improved health behavior and half showed worsening health behavior. After controlling for baseline levels of health behavior, we found that better health

behavior at 6 months was associated with decreases in depressive symptoms. No other changes affected health behavior at 6 months. These results suggest that interventions designed to improve health behavior among caregivers should also address depressive feelings.

WHO ARE OLDER PARENTS' PREFERRED CAREGIVERS: THE CONSEQUENCES OF CHILDREN'S MIGRATION AND INTERGENERATIONAL EXCHANGES WITH THEIR PARENTS IN RURAL CHINA

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This paper examined how rural to urban migration of adult children and intergenerational support influenced elder parents' choice of their preferred caregivers when they were sick in rural China. We also directed attention to gender differences in this process. Based on a three-wave longitudinal study in Anhui Province, China, with data collected in 2001, 2003, and 2006, we used fixed effects logistic regression to predict the likelihood of a child being chosen as the most preferred care givers. Results showed that children who were physically farther away and emotionally detached were less likely to be chosen as preferred caregivers both by older fathers and mothers. For an older father, receiving financial support from a child increased his expectations of that child as the most preferred care givers, and providing grandchildren care to a migrant child predicted his choice of that child as the most desirable caregiver. For an older mother, providing grandchildren care to a child also increased her expectations of the child to be the preferred caregiver, but this was not influenced by whether the child was a migrant. Daughters and sons are equally preferred even when most rural Chinese families followed the patrilineal family tradition. Although migration increases children's physical distance to their parents and reduced children's likelihood of being chosen as preferred caregivers, it strengthened intergenerational exchanges and consequently increased children's likelihood of being chosen as the most preferred caregivers at the same time.

DIFFERENCES BETWEEN MIDDLE AGE FATHERS' AND MOTHERS' SUPPORT TOWARDS ADULT CHILDREN: WHAT DO THEY GIVE AND WHY

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Previous research examining parent/offspring ties has focused primarily on mothers, excluding fathers. This study compared middle-aged mothers' and fathers' provision of different types of support to their grown children. We asked two questions: (a) do mothers provide greater support than fathers across all types of support? (b) do emotional and normative solidarity contribute to both parents' support? Participants (302 fathers, 331 mothers) indicated how often they helped each grown child ($n = 1,384$) with seven types of support. Findings from a 2 (between-subject, gender) by 7 (within-subject, types of support) repeated measures ANOVA revealed that mothers provided more total support to each child than fathers ($F(1, 630) = 5.48, p < .05$). Regarding different types of support, mothers provided more advice, emotional support, socializing, and listening to the child talk about daily life than fathers. Fathers provided more technological assistance and similar amounts of practical and financial support as mothers. Next, separate hierarchical regressions by parent gender tested whether affectional and normative solidarity explained total support to grown offspring, controlling for child's gender, age, distance from parents, and number of siblings. Relationship quality (affectional solidarity) significantly contributed to both parents' support. For normative solidarity, mothers' familism explained more help to offspring, but fathers' obligation explained more help to offspring. Findings suggested that fathers contribute less to offspring than mothers for socioemotional support, but not with regard to practical types of help. Findings supported solidarity theory but also indicated that solidarity may have different implications for mothers' and fathers' support behaviors.

HOW MIGHT RECEIVING CARE INFLUENCE THE OLDER PARENT-ADULT CHILD RELATIONSHIP?

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The purpose of this longitudinal research was to explore the possible mutual effects of older parents' affectual solidarity (closeness, understanding, communication, getting along) and conflict with a child and receiving care from that child. Social exchange theory, which posits a reciprocal exchange of support between caregiver and care receiver, suggests care receivers exchange emotional support, such as love. If so, might parents receiving care also feel more solidarity towards the caregiving child? A sample of 581 older adults from the 1994 and 2000 waves of the Longitudinal Study of Generations analyzed measures of solidarity, conflict, and receiving care (the number of types of instrumental care received) from the parents' perspective about their child. T-tests showed a simple relationship of higher 1994 solidarity for parents being cared for in 2000 ($t = -2.5, p < .05$), but no relationship with conflict. An exploratory cross-lagged model also showed significant effects of solidarity ($\gamma = .025$), as well as conflict ($\gamma = .048$), on receiving later care. Notably, there was a significant effect of receiving care ($\gamma = .29$) on later conflict, but no effect of care on solidarity. These results indicated increased levels of solidarity and conflict earlier in the relationship may influence receiving care later; however, it seems receiving care may lead to increased conflict with their child, but not solidarity. It is important to understand how parent-child relationships may be influenced by caregiving, as family caregiving is invaluable to long-term care. If older care recipients are experiencing more conflict, how might it impact their care and well-being?

ROLE STRAIN, PERSONAL STRAIN, AND WORRY ABOUT PERFORMANCE AMONG CAREGIVERS OF PEOPLE WITH LEWY BODY DEMENTIA

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People with Lewy Body Dementia (LBD) present a unique set of symptoms and challenges to family caregivers compared to other types of dementia. Prominent difficulties include motor impairment, which leads to greater ADL disability, and recurrent behavioral and emotional problems (BEP), including visual hallucinations, delusions, and sleep disorders. These problems are likely to impact caregivers' subjective burden. The present study used data from an internet survey conducted by the Lewy Body Dementia Association (LBDA). Respondents were 737 people who indicated they were currently involved in the care of their relative with LBD. Average age was 56 for caregivers and 75 for patients. Women comprised 87% of caregivers 39% of patients. Patients had been symptomatic on average for 6 years. Subjective burden was assessed with an 11-item short version of the Zarit Burden Interview (BI). A factor analysis revealed three dimensions: role strain, personal strain, and worry about performance. Multiple regressions were used to examine predictors of the three burden factors, including social characteristics of patient and caregiver, formal service use, ADL disability and BEP. We found that BEP was significantly associated with all three factors. ADL disability was related only to role strain. Age and gender contributed in different ways to the three factors. Formal service use had no significant associations with burden, but levels of use were low. These findings highlight the impact of BEP on subjective burden. BEP may be especially pivotal in disorders like LBD which have elevated rates of these problems.

GIVING AND RECEIVING AMONG ADULT FAMILY GENERATIONS: THE BALANCE OF INTERGENERATIONAL EXCHANGE ACROSS EUROPE

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Transfers of money and time among aging parents and their adult children are an important source of social protection and a key part of the 'generational contract'. In our previous research, we have shown that the usual direction of these transfers is downward, from parents to children, and that they vary systematically across welfare and family regimes in Europe. In the present paper, we compute a net outcome measure by converting the value of time transfers into wage equivalents, thus creating a unified account of transfer balances between parents and children. This allows us to describe (1) to what extent total intergenerational transfers are unidirectional or reciprocal, and (2) to what extent monetary transfers (inter vivos) and time transfers (practical help and support) balance or complement each other. In a third step, we analyze the factors that determine transfer balances both at the level of parent-child dyads and at the level of country-specific contexts. The analysis is based on the Survey of Health, Ageing and Retirement in Europe (SHARE).

SESSION 325 (PAPER)

HOW SERVICES AND INTERVENTIONS CHANGE LIVES

MAKING THE MOST OF YOUR HEALTHCARE APPOINTMENTS INTERVENTION FOR OLDER ADULTS

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Active engagement in healthcare can foster healthy behaviors and promote health, especially among older adults dealing with the complexities of managing comorbid chronic illnesses. This study tested the efficacy of an intervention for increasing patient engagement and improving health-related quality of life among older adults with multiple chronic illnesses. The intervention, Making the Most of Your Healthcare, uses evidence-based behavior change techniques to deliver publicly available patient education materials. We report the results of a three-group randomized controlled study conducted in a primary care setting. Seventy-nine participants were assigned to the intervention group, an attention control group, or usual care. The intervention and attention control groups attended a two-hour workshop and participated in two phone calls; one before and one after a naturally-occurring medical encounter. The intervention group's contacts were on patient engagement and the attention control group contacts were on general safety. Self-report measures were gathered by telephone interviews at baseline and six-months following baseline. The treatment group showed improved self-efficacy for self-management following intervention. Contrary to expectations, patient activation scores improved for both the treatment and usual care groups but not the attention control group. These initial findings suggest potential benefits for short-term, low-intensity patient engagement interventions.

PREVENTIVE HOME VISITS: TESTING A SOCIAL MODEL OF CARE IN THE UNITED STATES

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Most older adults wish to remain at home the rest of their life. Yet factors such as increasing frailty, social isolation and reduced commu-

nity mobility may lead to declines in well-being that in turn result in moves, hospitalization, or institutionalization. A successful preventive approach for at-risk older adults could mitigate the problems and unwanted outcomes as well as save costs. This paper presents a research project wherein occupational therapists are implementing an innovative non-medical Preventive Home Visits (PHV) protocol similar to what has been utilized in Denmark. The study, funded by the National Institute on Aging, is being conducted in three North Carolina counties with an effort to establish evidence of feasibility and effectiveness. Therapists provide infrequent but regular visits to older adults in their homes to assess needs, the environmental, social and occupational situation, and to provide recommendations to optimize function and well-being. Using an experimental, repeated measures design, investigators are collecting function, health, healthcare utilization, and quality of life measures on a population of potentially vulnerable community-dwelling older (75+ years) adults. Feasibility in both data collection and intervention delivery is very good to date with little missing data or attrition. The most frequent recommendations by therapists to participants include affirmation of healthy habits, referrals to exercise regimens and senior center activities, and incorporating safety features in the home environment. While the model's effectiveness is yet to be determined, we have learned valuable lessons about how to design and implement such a program.

WHO USES BEREAVEMENT SERVICES? AN EXAMINATION OF SERVICE USE BY BEREAVED DEMENTIA CAREGIVERS

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Despite the availability of a wide range of services and interventions for bereaved family caregivers, little is known about the characteristics of those who use them. The current study employed Andersen's Behavioral Model of Health Services Use in an examination of bereavement service utilization among dementia caregiver participants (N=224) in the Resources for Enhancing Alzheimer's Caregiver Health (REACH) study. Approximately one in three participants utilized bereavement services, primarily during the first 9 months after the death of the care recipient. Support groups, counseling, and psychotropic medications were used across individuals. Depressive symptomatology and complicated grief served as need factors, with higher levels resulting in higher probability of service utilization. Race/ethnicity served as a predisposing characteristic, with Black caregivers less likely and Hispanic caregivers more likely than White caregivers to utilize support groups. Future research should focus on interventions designed to assure timely access to those bereaved family caregivers who are most in need.

RURAL COMMUNITY DWELLING OLDER ADULTS: CREATIVE OUTREACH IN BEHAVIORAL HEALTH INTEGRATED SERVICES

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Integrating behavioral health services is uncommon especially in rural communities of Kentucky. A federally funded project with an emphasis on evidence-based services to older adults in medically underserved areas of Kentucky provided the basis of this outreach. Two service delivery models were tested using an experimental, longitudinal, pre-post test design. Social work students and professionals worked in tandem with physical therapy students and professionals to provide comprehensive health and mental health assessments and wellness plans to improve health outcomes. Collaborative efforts were made through another grant funded by Kentucky Department for Mental Health and

Substance Abuse specific for rural community dwelling elderly that combined social work, physical therapy, nursing, case managers, and a prevention specialist to create services that were otherwise not available. Results include service to 38 rural dwelling clients after the federal funding ended. The behavioral health rural project created an environment in which the regional Area Agency on Aging, the regional community mental health center, and university partners identified common interests and goals in expanding and extending a wider array of services to older people. Results indicate significant gains for all participants in viewing their health more positively, improving their self-efficacy to manage their health, experiencing less pain and depression, improving their lower extremity muscle strength, reducing fracture and fall risk, and removing fall hazards in and around their home.

TRANSLATING AN EVIDENCE-BASED PROGRAM TO THE COMMUNITY: REDUCING DISABILITY IN ALZHEIMER'S DISEASE

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The evidence-based program "Reducing Disability in Alzheimer's Disease (RDAD)" was developed and tested in a rigorous randomized control trial and now is considered an evidence-based practice that benefits both persons with dementia and their caregivers. RDAD teaches persons with dementia simple exercises to improve health and functioning, and provides caregivers with behavior management skills to address problem behaviors related to dementia. Replications of evidence-based practices in community-based service organizations are important additions to the network of aging services. However, implementation involves many unique challenges in the process of translating research to practice. This presentation uses the RE-AIM framework to address and analyze the challenges and strategies of implementing RDAD in a local Alzheimer's Association chapter. The analysis contrasts four major components of a controlled research protocol with the realities of a naturally occurring service-agency environment. One component was developing a system to guide projections for the number of families who could be served and approaches to recruitment. A second component related to a methodology for assuring the fidelity of the intervention and evaluating quality assurance. Third was determining appropriate professionals to implement the intervention including the required educational background, work experience, and extent of training on the intervention. Fourth was adaptation of the intervention itself to accommodate the realities of an agency environment without damaging the integrity of evidence-base. Discussion of these components guides further program enhancement in additional settings.

SESSION 330 (PAPER)

JUST DO IT: CIVIC ENGAGEMENT

SOCIAL CAPITAL, FAITH-BASED ENGAGEMENT AND PERCEIVED HEALTH OF OLDER ADULTS: A STRUCTURAL APPROACH

D. Mukherjee, *Social Work, Southern Illinois University Carbondale, Carbondale, Illinois*

Purpose: The purpose of this study was to understand aging and health from the social capital perspective. This is done by coalescing together variables, such as social support, social networks, social trust and faith-based social engagement that have been used in existing literature to construct a 'social context' that supposedly could influence perceptions about health among older adults. **Methods:** Secondary data analysis was conducted using data from the Social Capital Community Benchmark Survey (SCCBS, 2001). The final sample consisted of 471

responses. Structural equation modeling with maximum likelihood estimation was used to examine the direct and indirect effects of the variables. Missing data has been imputed using the Maximum likelihood estimation. Results: According to the fit indices, the model provided a very good fit to the data. As predicted, the result indicated that friendship network was a significant variable in influencing social support. Faith-based social engagement and social support also significantly influenced social trust, and social trust significantly influenced reported health. Implications: These findings underline the importance of social capital in perception of health and self-rated health outcomes for older adults. The authors discussed the findings in the context of baby-boomer retirement and the challenges it poses to the healthcare system.

WHY OLDER AMERICANS ARE INVOLVED IN PRODUCTIVE ACTIVITIES: EXPLANATIONS FROM THE RESOURCE AND STRATEGIC MOBILIZATION MODEL (RSM)

H. Shen, *School of Social Work, University of Michigan, Ann Arbor, Ann Arbor, Michigan*

Older people involve themselves in productive activities with different reasons, but the theoretical frameworks examining their engagement in productive activities are limited. This study introduces and tests a theoretical model, the Resource and Strategic Mobilization model (RSM) to systematically examine how personal resources and social networks influence older persons' participation in three major productive activities: employment, volunteering, and family caregiving. Using nationally representative data from the 2004 Health and Retirement Study, this study included 15,990 community-dwelling older adults (55 and above). Predicted variables included personal resources (financial resources and physical resources), and social networks (family demands and social events). Sociodemographic characteristics were controlled to obtain accurate impacts from resources and social networks. Three logistic regression models were applied to elucidate whether older persons' personal resources and social networks influenced their engagement in employment, volunteering and caregiving. Four additional logistic regression models were used to understand if mediation effects existed among employment, volunteering and caregiving. Findings showed that personal resources influenced whether older people worked, volunteered or provided care. Older people were more likely to be volunteers if they attended more social events (e.g. religious services). It was also found that older workers were less likely to be caregivers, and being caregivers decreased their chances to work or to volunteer. As the RSM predicts, the diverse contexts of older persons, as indicated by personal resources and social networks, matter. Further implementation of the RSM on understanding productive activities in which older people engage will also be addressed.

REACHING FOR TRANSCENDENCE: OLDER ADULTS IN SERVICE TO HUMANKIND

K. Piercy¹, C. Cheek², 1. *Utah State University, Logan, Utah*, 2. *Penn State Mont Alto, Mont Alto, Pennsylvania*

Although religious organizations attract the largest number of volunteers (Bureau of Labor Statistics, 2009), little is known about the efforts of their senior volunteers, particularly those with time-intensive or lengthy service commitments. A qualitative study explored motivations for service; the ways in which volunteers were affected by their experiences, and perceived personal gains from service. Nineteen men and 19 women over age 50 who participated in humanitarian or disaster relief missions responded to semi-structured interviews. The Latter-day Saint, Mennonite, and Lutheran participants had an average age of 56.24 (SD = 6.22), were mostly married (86.8%), and had served an average of 81.95 weeks (SD = 61.2). Using McCracken's 5 step method for analyzing long interviews, results suggested that participants served because of a desire to help others, the influence of significant others who were role models, and/or active recruitment by friends. Most perceived that they had changed in positive ways. Increased awareness

of global issues, human suffering, and living simply prompted many to become less materialistic, more compassionate, authentic, and tolerant of other races, cultures, and beliefs. Among the gains reported were spiritual growth, expanded social networks, increased closeness to spouses, and greater acceptance of what one could not control. Respondents also stated that after serving, it was challenging to return home and perform “normal” routines of focusing on themselves again. Findings support Erikson’s concept of ego integrity in the volunteers’ ability to transcend personal ego development in favor of embracing personal and social responsibility for the welfare of others.

FORMAL PRODUCTIVE ENGAGEMENT IN THE YEARS PRECEDING THE THIRD AGE

D.C. Carr, L.K. Manning, *Miami University, Oxford, Ohio*

Productive aging initiatives have been systematically linked with the period of old age commonly referred to as the “third age.” However, no previous research about the third age has examined engagement in formal productive activities during the period preceding the third age of life, the period when activity patterns during the early years of the third age are likely to develop. This paper examines the total amount of time spent engaging in productive activities (paid work and formal volunteering) and the ratio between time spent engaging in formal volunteering and time engaging in paid work activities among adults 55 to 65 years old. The data are from the 1996 wave of the Health and Retirement Study, which provides detailed information about engagement in formal volunteer activities. Linear regression models are used to predict 1) the total amount of time spent engaging in formal productive activities and 2) the ratio of formal volunteer to paid work activities, controlling for age, income, employment status, health status, education, race, and gender. Preliminary results indicate that in the decade preceding the third age, the total amount of time engaged in formal productive activities declines and the ratio of volunteer to work hours increase. In this presentation, we argue that in order to understand the factors shaping productive engagement in the third age, it is essential that researchers examine the patterns of productive activity in the period preceding this period of life.

SESSION 335 (SYMPOSIUM)

LINKING ACTIVITY, HEALTH AND BUILT ENVIRONMENT

Chair: *H. Chaudhury, Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

Discussant: *J.A. Sanford, Georgia Tech, Atlanta, Georgia*

There is a growing research and public policy interest in understanding the relationships among health, activity and built environment. Current challenges in this area include: a) better understanding of the pathways in which built environmental aspects (e.g., mixed land-use, high density) influence individual and collective physical activity levels, b) the interrelationship between the built and social environments in effecting and sustaining health behaviours, c) valid and reliable measures of the built environment effecting activity and mobility addressing a wide range of built forms, and d) sustainable interdisciplinary mechanism linking planners, design professionals and public health professionals to make meaningful and effective planning and policy decisions. This session will present four individual studies addressing some of these challenges representing diverse geographical regions, populations and research methods. The first study demonstrates the ability of trans-institutional (government, university) cooperation to affect changes in the built environment to improve walkability. The second study is based on development of an environmental audit tool for older adults (SWEAT-R) and use of photovoice method as a participatory approach of engaging older adults in identifying physical and social environmental enhancers and barriers in their neighborhoods. The third paper is based on a study examining walkability of government-subsidized housing in North America and East Asia using SWEAT-R tool. The final study

reports from an interdisciplinary project measuring outdoor mobility among urban living persons with dementia (PWD), mildly cognitively impaired (MCI) and healthy individuals, aged 61-89 in Israel and Germany based on interviews and tracking protocols.

NEIGHBORHOOD ENVIRONMENT AND PHYSICAL ACTIVITY OF OLDER ADULTS: DEVELOPMENT OF AN AUDIT TOOL AND USE OF PHOTOVOICE

H. Chaudhury¹, A. Mahmood², Y. Michael³, A. Sarte¹, *1. Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada, 2. Oregon State University, Corvallis, Oregon, 3. Oregon Health & Science University, Portland, Oregon*

The goal of this study was to examine the effect of neighborhood physical environment and social capital on the physical activity of older adults. Eight neighborhoods were selected across Vancouver, British Columbia and Portland, Oregon that represent variation in residential density and mixed land-use. An environmental audit tool “SWEAT-R” (Seniors Walking Environmental Audit Tool – Revised) was developed and 357 street segments in Portland and Vancouver neighborhoods were assessed. Also, photovoice technique engaged older adults in the research process by photographing and journaling their perceptions of their neighborhood environment in relation to physical and social barriers and facilitators to being physically active. Inter-rater reliability of the SWEAT-R indicate that percent agreement between paired observers was 95% or higher for more than 80% of SWEAT-R items. Photovoice-based themes identify neighborhood settings that are multipurpose and that attract older adults for socialization, shopping, walking etc., and importance of transportation options.

TIME OUT-OF-HOME AND COGNITIVE IMPAIRMENT IN OLDER ADULTS: WHAT A FOUR-WEEK WINDOW CAN TELL

F. Oswald¹, H. Wahl¹, N. Shoval², G. Auslander³, T. Freytag⁴, O.K. Schilling¹, E. Voss¹, U. Seidl⁵, *1. University of Heidelberg, Institute of Psychology, Heidelberg, Germany, 2. Hebrew University of Jerusalem, Dept. of Geography, Jerusalem, Israel, 3. Hebrew University of Jerusalem, School of Social Work, Jerusalem, Israel, 4. University of Heidelberg, Institute of Geography, Heidelberg, Germany, 5. University of Heidelberg, Dept. of General Psychiatry, Heidelberg, Germany*

The interdisciplinary project SenTra measures outdoor mobility by means of tracking technology among urban living persons with dementia (PWD), mildly cognitively impaired (MCI) and healthy individuals, aged 61-89 in Israel and Germany. The aim of this presentation is (1) to describe differences between healthy, MCI and PWD in time out-of-home and (2) to analyze relationships between personal (age, gender, health) and environmental predictors (living alone) and time out-of-home, as well as between time out-of-home and well-being outcomes (life satisfaction, affect). Findings are based on interviews and tracking protocols over 4 weeks from 104 participants in both countries (50 healthy, 39 MCI, 15 PWD). On the mean level time out-of-home differences were observed between healthy (5.26h), MCI (3.79h), and PWD (3.18h). However, regression analyses showed that differences diminish when considering other predictors (age, gender, health). Forthcoming analyses will differentiate findings in relation to average pace of mobility or number of trips.

WALKABILITY AT GOVERNMENT-SUBSIDIZED HOUSING IN NORTH AMERICA AND EAST ASIA

E. Hwang¹, G. Gutman¹, A. Sixsmith¹, E. Cress², E. Chui⁴, A. Ziebarth³, *1. Gerontology Research Centre, Simon Fraser University, Vancouver, British Columbia, Canada, 2. University of Georgia, Athens, Georgia, 3. University of Minnesota, St. Paul, Minnesota, 4. University of Hong Kong, Hong Kong, Kwaloon, China*

The purpose of this study was to examine the walkability at government-subsidized housing in Canada, USA, China, and Korea. In each country, we selected two sites (or total eight sites) based on their par-

ticular interests in making the sites more “age friendly” as the residents became aging in place. The Senior Walking Environmental Assessment Tool – Revised (SWEAT-R) was used to evaluate the street-level segments. Items on the SWEAT-R include four topic areas: 1) functionality (i.e., land use, building types, sidewalks); 2) safety; 3) aesthetics (i.e., quality of micro-scale urban design, visual appeal of streetscape); and 4) destinations (i.e., availability of local amenities and transportation). In all the sites, sidewalks were presented, but buffer zones were presented at only three sites. At northwest and southeast corners at each segment, safety was emphasized; however, the most problematic area was at mid-block crossing area. In terms of availability of local amenities, restaurants and drug stores were the most frequently presented and facilities for leisure activities (i.e., parks, bookstore, fitness) were the least frequently presented. Overall, there was lack of road signs to protect pedestrians (i.e., stop, yield and pedestrian crossing signs).

A TRANSINSTITUTIONAL APPROACH TO IMPROVING WALKABILITY

E. Cress, R. Mullis, *University of Georgia, Athens, Georgia*

Walkability to businesses within 20 min increases physical activity and translates to 30-60 minutes of persistent physical activity. Citizens and visitors (n=22) to town (population 2,825) provided information on the safety, accessibility and aesthetic appeal of 4 routes connecting the city limits to the business town center (1 mile radius). 31% indicated that the route was pleasant to walk, 25% indicated the need for signal for crossing and need for repair of sidewalks, the need for increased connectivity of neighborhoods and more sidewalks. Summary, analysis and suggested solutions were presented to the city council. Since the survey priority is given to connectivity that impacts the most people. A traffic light was installed, sidewalks have been repaired, curb and gutter (approximately \$24,000). New monies include grant (\$530,000) and special assessment tax (\$650,000). Elevated awareness of the importance to walkability, citizen input, and a dedicated city council has combined to improve walkability.

SESSION 340 (SYMPOSIUM)

NOBODY’S BURDEN: OLD AGE IN THE GREAT DEPRESSION

Chair: R. Ray, *Wayne State University, Detroit, Michigan*

In this symposium, we take a historical look at the experience of old age during the Great Depression. We draw on the case files of a charitable organization in Detroit, Michigan, the Luella Hannan Memorial Fund (LHMF), which provided pensions to men and women from 1929 until their deaths. We will show how local and national government, the charitable organization, its case workers, its clients and their families struggled to overcome the stigma of old age as a “burden.” Our objective is to explore what “healthy aging” means during times of personal and social crisis. The five panelists will try to reconstruct the look and feel of the Great Depression as experienced by people over 60. Thomas Jankowski will explain national and local old-age policy during this time, as well as the specter of the poor house, which casts its shadow over all of the case files. Heather Dillaway will show how one formerly wealthy woman maintained her social status, although “newly poor.” Toni Calasanti and Jill Harrison-Rexrode will explain how African-Americans worked to prove and sustain their “worthiness” for a pension from a predominantly white organization, and Faith Pratt Hopp will discuss how one woman first accommodated to and then resisted the scientific charity practiced by the social workers. Ruth Ray will conclude by examining the themes of healthy aging reflected in the files and their relevance today.

EVERYBODY’S BURDEN: POOR LAWS, PUBLIC WELFARE, AND THE POORHOUSE IN DEPRESSION-ERA DETROIT

T.B. Jankowski, *Institute of Gerontology, Wayne State University, Detroit, Michigan*

When savings ran out, health faltered, and work was not available, older Detroiters were forced to rely upon friends, family, and private charity for support. When those avenues were exhausted, they turned to a meager system of outdoor public relief. When outdoor relief failed, they were faced with the prospect of going to the poorhouse. That prospect, and the fear and dread associated with it, suffuse many of the Hannan case files and represented a significant barrier to healthy aging at the time. This presentation will address the conditions faced by Detroit’s older residents during the economic catastrophe of the Great Depression. It will explore the state poor laws and the inadequate local public welfare system in pre-New Deal Detroit, and it will pay particular attention to the county poorhouse, known as the Eloise Infirmary, and the role of Eloise as a source of trepidation for the old poor.

ACCOMMODATION OR HEALTHY AGING? AN EXAMINATION OF ONE WOMAN’S STRUGGLE TO SUSTAIN PRIVILEGE WHILE RECEIVING AN OLD AGE PENSION

H.E. Dillaway¹, C. Bailey-Fakhoury², *1. Sociology, Wayne State University, Detroit, Michigan, 2. Wayne State University, Detroit, Michigan*

In this presentation, we document how the process of receiving an old age pension might seemingly take privilege away from and “burden” formally privileged women, and how aid recipients might resist this loss of privilege. We explore how one client served by the Luella Hannan Memorial Home resists the loss of privilege when interacting with LHMF staff, landlords, doctors, and family members, and attempts to reify her sense of self despite poverty. We argue that this client sustains the important part of her former privilege – i.e., her identity or sense of self. Thus, economic and social privileges are separate entities, and losing social privileges may burden individuals, especially aging women, more than poverty. This case highlights how privilege is sustained at the micro-level, and differences between social and economic privilege. We also suggest that, in sustaining a privileged identity, this woman engages in “healthy aging” and protects herself from “burden.”

SOCIAL LOCATION AND THE SOCIAL CONSTRUCTION OF ‘DESERVINGNESS’ IN OLD AGE

T. Calasanti, J. Harrison-Rexrode, *Virginia Tech, Blacksburg, Virginia*

We focus on the two African American clients—one man and one woman—funded by Hannan Foundation and explore the ways in which race, class, and gender contributed the negotiation process by which case workers (Visitors) designated old people as deserving of aid. By looking at their case histories over time, and comparing them with selected white clients, we argue that, first, the presentation of self as an old person “worthy” of funding varied in particular gendered, racialized, and class-based ways. Second, continued funding involved maintaining one’s image as deserving, a negotiation process that both varies by social location and becomes more difficult for clients as they age and become potentially subject to ageism. Overall, we find that their class, race, and gender circumscribed the African American clients’ behaviors more narrowly, such that they could be depicted as no longer worthy of funding much more quickly than whites.

SOCIAL CASE WORK, BURDENHOOD, AND THE CHALLENGES OF HEALTHY AGING IN THE GREAT DEPRESSION: THE STORY OF MRS. LOVELL

F.P. Hopp, N. Thornton, *Social Work, Wayne State University, Detroit, Michigan*

In this presentation, we will recount the challenges faced by “Mrs. Lovell” as she attempts to engage in healthy aging amidst progressive

illness and the economic limitations imposed by the Great Depression. During this time period, the emerging profession of social casework faced immense challenges in meeting the needs of the growing number of people facing economic hardship, while developing and maintaining the systematic, investigative model of Scientific Charity. Within this context, Mrs. Lovell exerts self-determination and personal power by both accommodating and resisting case work principles. We will describe how Mrs. Lovell's evolving and changing relationships with her case worker are influenced by her need to maintain dignity, preserve independence, and avoid burdenhood as she faces poverty and progressively severe illness.

SESSION 345 (PAPER)

QUESTIONS ABOUT OLDER DIVERSE POPULATIONS

EXAMINING ACCULTURATION AND ITS MECHANISMS ON HEALTH AMONG OLDER LATINO ADULTS

A. Afable-Munsuz, S. Gregorich, E. Perez-Stable, *Division of General Internal Medicine, University of California, San Francisco, San Francisco, California*

Background: Acculturation has been linked to the likelihood of chronic health conditions among older Latino adults. We examined whether greater stress and lower social support mediated the association between acculturation and co-morbidity. Methods: We analyzed data from three waves of the Hispanic Established Population for the Epidemiologic Studies of the Elderly (H-EPESE), a representative sample of community-dwelling older (age >65) Mexican Americans in Southwestern U.S. (baseline N= 3,050). Acculturation was measured by a 5-item acculturation scale and language of interview. A binary co-morbidity outcome (self-report of 3 or more conditions i.e. diabetes, hypertension, hip fractures, arthritis) was modeled with logistic regression adjusting for age, sex and education. Whether social support (2-items measuring respondent's perception of family support in times of trouble) and life stressors (8-items measuring personal/family illness, financial stress, crime) mediated the association between acculturation and co-morbidity was tested with a series of regression models. Results: Using the 1993 wave, English language interview (vs. Spanish) was associated with an increased likelihood of co-morbidity (OR:1.9; 95% CI: 1.3-2.6). After the addition of life stressors (OR:2.7; 95% CI: 1.8-4.0) and social support (OR:0.6; 95% CI: 0.3-0.9), both significant predictors of co-morbidity, English language effect decreased but remained significant (OR:1.7; 95% CI: 1.2-2.4). Further, acculturation had a significant indirect effect via life stressors (but not social support) on co-morbidity (p-value <0.05), suggesting mediation. Conclusion: Addressing life stressors of acculturating Latinos can potentially reduce the burden of chronic disease. More research is needed, however, to understand other mechanisms that link acculturation to health.

ASSESSING ELDER'S HEALTH AND INSURANCE STATUS: THE EFFECTS OF RACE AND MARRIAGE

C. Shieh, *National Institutes of Health, Bethesda, Maryland*

The unprecedented trend in demographic aging and the unmet need in health insurance coverage have a profound impact on the medical-care service utilization and quality of life of U.S. elderly. Although population age 65 and above are covered by Medicare, identifying vulnerable groups with elevated health-care needs yet unable to acquire additional insurance is important for the purpose of improving contemporary healthcare policy. Using the 2006 Health and Retirement Study, this project examines how elders' race and marital status affects their health and additional insurance acquisition. Outcomes of self-rated health, signing up for a Medicare prescription plan, being covered by Medicaid, having any private insurance, and having long-term care coverage, are investigated. Factors of socio-demographic characteristics,

economic constraints, and social support, are included in the regression models for statistical control. Holding key variables constant, race and marital status were significantly associated with elders' health and insurance status. African American elders were less likely than Whites to have good health ($p<.01$). Minority seniors also have higher propensities than Whites to be covered by Medicaid, and have lower likelihoods to acquire private health insurance and long-term care plans ($p<.001$). Marriage has a beneficial effect on elder's health status and access to health insurances. Divorce and widowhood provide a different dynamic in shaping later-life health-care strategies and therefore, influencing insurance possession. Policy recommendations include implementing racial-specific health interventions, providing insurance knowledge and participation incentives, and educational programs helping minority elders to identify the most useful insurance plans, are discussed in the study.

HEALTH SERVICES UTILIZATION OF SOUTH ASIAN OLDER ADULTS LIVING IN THE UNITED STATES

S.S. Jesmin, I. Amin, *Sociology, University of Louisiana at Monroe, Monroe, Louisiana*

The purpose of this study was to understand ambulatory health care utilization of South Asian Older Adults living in the United States. Research on older minority populations' health care access and utilization is limited although demographic projections indicate that US elder population is becoming racially and ethnically diverse. This study focused on the health status, medical needs, utilization pattern and predictors of South Asian older adults in US, most of whom are foreign-born. Specific research questions were: what are the challenges the South Asian American elderly population face as they age? What kind of services do need? Are culturally sensitive services available to them? Andersen's behavioral model for health care utilization was used as theoretical framework for this study. The dependent variable was the number of visits to physicians for health related reasons such check up or consultation. Data were collected from 200 Asian Americans over age 60 identified through snow-ball sampling technique. Multivariate regression analyses were conducted to test the hypotheses. Results show that the length of stay in the United States is a significant predictor of health services utilization. This research identified several barriers to care utilization, and indicates that most of the South Asian older adults' health behavior is heavily influenced by their ethnic cultural beliefs and practices. This study provides baseline information on use of health services by South Asian American older adults. Understanding of the health services utilization determinants and patterns can help program developers to design culturally sensitive interventions for older South Asian Americans.

DOES A RECRUITMENT BROCHURE AID IN THE RECRUITMENT OF OLDER LATINOS FOR A TELEPHONE SURVEY?

J. Santoyo-Olsson, G. Moreno-John, C. Kaplan, A. Napoles, *University of California, San Francisco, San Francisco, California*

Background: Evidence-based recruitment methods are needed to address Latinos' under-representation in clinical research. Objective: Assess the effects of an English/Spanish recruitment brochure on telephone survey participation rates. Participants: Latino primary care patients aged ≥ 50 with ≥ 1 visit during the preceding year ($N=1,339$) were sampled from four clinics. Design: Patients were randomly assigned to receive or not receive a brochure published by the Office for Human Research Protections in the initial mailing introducing a survey of cultural factors and colorectal cancer screening. Survey participation rates were compared across brochure groups. Results: Of 1,339 patients, 99 were known to be ineligible. Of the remaining 1,240, 473 (38%) completed the survey; 450 (36%) were unable to be contacted; and 317 (26%) refused. Although the proportion of respondents who participated was higher among those receiving the brochure, the difference was not statistically significant (54% vs. 46%, $p=0.18$). In the multivariate model,

women (OR=1.6; 95% CI 1.2, 2.2) were more likely, and English-speakers (OR=0.51; 95% CI 0.4, 0.7), those aged 65+ (vs. aged 50-54; OR=0.5; 95% CI 0.3, 0.8), and those with private insurance (vs. no insurance; OR=0.4, 95% CI 0.3, 0.6) were less likely to participate; there was no significant difference by brochure group (OR=0.9, 95% CI 0.7, 1.1). Participants who recalled receiving the brochure were more likely to participate (OR=4.0; 95% CI 1.7, 9.4), and tended to be women and aged 50-54. Conclusions: Recruitment methods that are more intensive than a brochure may be needed to enhance survey participation rates of Latinos.

ARE MIDDLE-AGED AND OLDER IMMIGRANTS MORE LIKELY TO USE COMPLEMENTARY AND ALTERNATIVE MEDICINE THAN THE U.S.-BORN?

J. Treas, G. Bostean, *Sociology, University of California, Irvine, Irvine, California*

Complementary and alternative medicine (CAM), a diverse group of health care practices and products that is distinct from conventional medicine, is gaining in popularity in the U.S. With pooled data from the 2002 and 2007 Alternative Health Supplement & Persons-file of the National Health Interview Survey (NHIS), this paper hypothesizes that middle-aged and older immigrants will be more likely to use CAM than are their U.S.-born counterparts due to limited acculturation to U.S. health practices as well as income and insurance barriers to conventional care. Using weighted logit models, we consider the likelihood of adults ages 45 and older ever having used CAM and using it in the past 12 months before the survey. All things considered, older immigrants are about 20% less likely ($p < .001$) than the U.S.-born older population to report ever having used any form of CAM. Older immigrants' significantly lower rates of CAM usage persist even with controls for age, although interactions between age and immigration status are only statistically significant for more recent immigrants (less than 15 years in the U.S.). Independently, age and foreign-born status both are negatively related to CAM use. When considered together, they seem to have a compound effect on CAM use, such that recent, older immigrants are much less likely to have used CAM than younger, more established immigrants and U.S.-born persons. Consistent with previous research, women are more likely than men, and whites more likely than minorities (black, Hispanic, Asian), to report CAM usage.

SESSION 350 (PAPER)

SUBSTANCE ABUSE AMONG OLDER ADULTS

ALCOHOL USE AND DEPRESSIVE SYMPTOMS: RESULTS FROM A 9-YEAR FOLLOW-UP STUDY

M. Aartsen¹, D. Van Etten², H. Comijs³, P. Cuijpers¹, D.J. Deeg³, *1. Sociology, VU University Amsterdam, Amsterdam, Netherlands, 2. Knowledge Centre of Elderly Psychiatry, Zeist, Netherlands, 3. EMGO Institute, Amsterdam, Netherlands*

Aims: To describe the longitudinal pattern of alcohol use among older men and women, and understand the often observed complex relationship with depressive symptoms. **Design:** A nine-year longitudinal and prospective study with measures in 1992, 1995, 1998 and 2001. **Setting:** Population study **Participants:** 2,119 participants of the Longitudinal Aging Study Amsterdam, aged 65 to 85 years at baseline. **Measurements:** The interview included the Centre for Epidemiologic Studies Depression Scale (CES-D) and questions about the frequency and quantities of alcohol use. **Findings:** Eight percent of the older women and five percent of the older men drink in excess of the limits recommended by the National Institute on Alcohol Abuse and Alcoholism. Alcohol drinking does not increase the level of depressive symptoms, nor vice versa. The only significant effect observed was that older, excessively drinking men with poor mental and physical health reduced alcohol drinking over time. **Conclusions:** A relation between depressive symp-

toms and alcohol use could not be observed in a population based sample of older adults. Excessively drinking men, who are in relatively good health, stick to their drinking habits, whereas excessively drinking men with mental and physical health problems are inclined to cut down alcohol drinking when becoming older. Public prevention strategies are needed to make older heavily drinking men who are still in relatively good health aware of the potential risks of excessive alcohol use.

TESTING THE CO-OCCURRENCE OF DEPRESSIVE SYMPTOMS AND MULTIPLE ILLICIT DRUG USE AMONG A COHORT OF MIDDLE-AGED AND OLDER MEN WHO HAVE SEX WITH MEN (MSM)

S. Lim, K. Kim, J. Burke, N. Markovic, A. Silvestre, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Introduction: Mental disorders and substance use disorders are known to co-occur in MSM. Older MSM reported unique challenges to aging and may be vulnerable to substance abuse and depression. We examined the trajectories of illicit drug use and depressive symptoms among MSM over the age of 50 and tested if the trajectories co-occur. **Method:** Within 10-year (1996-2006), Pitt Men's Study data (N=273), we examined the trajectories of multiple illicit drug use and depressive symptoms for men within the age range of 43 and 63 by using the semi-parametric, group-based approach (Nagin, 2005) **Results:** The best-fitting model yielded three distinct trajectory groups with respect to multiple illicit drug use. The majority of the participants (44.5%) did not use illicit drugs at any age, while 36.7% consistently used one drug across the age range of the study. A smaller yet substantial group (18.9%) used multiple drugs at middle age and declined to using one drug by age 63. Depressive symptoms, antidepressant use, smoking, binge drinking, and risky sexual behaviors at any age were differentially associated with the trajectory groups. However, the trajectories of multiple illicit drug use were not associated with trajectories of depressive symptoms. **Conclusion:** Although the prevalence of any illicit drug use appears to decline among MSM with aging, it is much higher than the estimate among the older adults in the general population. Future research needs to replicate the test of co-occurrence of depression and illicit drug use with consideration of potential confounders.

SUBJECTIVE DEFINITIONS OF SUBSTANCE ABUSE PROBLEMS: DOES AGE MATTER?

E.K. Bozzelli, *Research, Miami University, West Chester, Ohio*

Alcohol and other drug abuse are becoming increasingly salient topics concerning the health of older adults, and the language associated with the behavior is not clearly defined. Therefore, this study examined perceptions of two age groups regarding what constitutes a "substance abuse problem." Making a contribution to research on the life course, findings reveal that there are definite age norms associated with substance use behavior. Study respondents were college students aged 18 through 26 (N=101) and Baby Boomers aged 43 through 62 (N=113) in a small mid-western college town. In completing vignette-based questionnaires, respondents rated the degree to which three hypothetical individuals of different ages had "a substance abuse problem" on a scale ranging from 1 (no problem at all) to 5 (very severe problem). Results indicate that both college students and Baby Boomers share the belief that heavy substance use is significantly less problematic for a 21-year old than for a Baby Boomer or for an adult in their 70's ($p < .000$). However, college student respondents consistently rated all 3 of the targets to have less of a problem in comparison to ratings assigned by Baby Boomers ($p < 0.05$). These findings support the idea that "partying" during college years is a rite of passage in our society and indicate that beliefs about acceptable alcohol and other drug use change as a function of life experience (i.e., a "growing up" effect).

ALCOHOL CONSUMPTION PATTERN, PROBLEM DRINKING, AND MENTAL HEALTH OUTCOMES AMONG OLDER ADULTS IN CONGREGATE LIVING

O. Baik, K.B. Adams, *Mandel School of Applied Social Sciences, Case Western Reserve University, Cleveland, Ohio*

Alcohol misuse or abuse among older adults is a growing public health concern. The association between older adults' alcohol consumption patterns and mental health outcomes remains arguable, especially in the case of moderate drinkers. We sought to describe alcohol consumption patterns and identify mental health parameters associated with drinking characteristics. Cross-sectional data were collected from 178 congregate housing residents aged 64 to 96, including quantity and frequency of alcohol use, the Short Michigan Alcoholism Screening Test - Geriatric version (S-MAST-G), demographics, health status, and measures of depression and anxiety. Among the participants, 35.9% reported no consumption of alcohol, 36.5% were minimal drinkers (<1 drink/week), 12.9% were moderate drinkers (1-7 drinks/week), and 5.6% were at-risk drinkers (8-14 drinks/week). Additionally, 6.7% of those actively using alcohol were defined as "problem drinkers" based on S-MAST-G scores of two or more affirmative answers. In this sample, heavier current drinking was associated with older age, white race, female gender, living alone, and adequate income. In bivariate logistic regression analyses on 166 of these respondents controlling for age, gender, race, relationship status, education, and health and functioning measures, S-MAST-G-defined problem drinkers showed significant positive association with subthreshold or criterion depression {Odds ratio (OR) (95%CI): 4.890 (1.173, 20.387)}, but non-significant association with anxiety status. Current alcohol consumption categories were not associated with either outcome. Problem drinkers were significantly more likely to be depressed than non-problem drinkers. Findings have implications for identification of older adults with problematic drinking and the linkages between alcohol misuse and mental health outcomes.

SESSION 355 (SYMPOSIUM)

TRANSITIONS IN COGNITIVE IMPAIRMENT, ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

Chair: J. Bond, *Health and Society, Newcastle University, Newcastle upon Tyne, United Kingdom*

Discussant: R. Fortinsky, *University of Connecticut, Farmington, Connecticut*

The focus of this symposium is the experience of people who live with cognitive impairment, their family members and informal caregivers of the journey from early signs of cognitive impairment to end of life with a particular emphasis on the transitions between the different 'medicalised' stages of mild cognitive impairment, Alzheimer's disease and other dementias in Canada, the United Kingdom and United States. From a social constructionist perspective, Bond will review the clinical stages of cognitive impairment highlighting boundary issues and the social significance of transitions along the impairment journey. Manthorpe and Samsi will describe the UK Mental Capacity Act and report the views of older people about personal planning for transitions in cognitive impairment in later life. Using epidemiological data from the New York tri-ethnic study Albert and colleagues will review transitions along the impairment journey. The focus of this analysis will be on changes in functional ability in relation to base-line assessment of cognitive function. Drummond and colleagues will report on a Canadian study that provides a cross-cultural perspective on the transition around the diagnosis of Alzheimer's disease from the perspective of people with cognitive impairment. Together these papers will define and critique the different clinical stages of cognitive impairment, describe and compare the impact of the transition between different stages on the person with the condition and their family caregivers and highlight policy issues that need to be addressed in the different countries.

STAGES IN COGNITIVE IMPAIRMENT: BOUNDARY ISSUES AND THE BIOMEDICALISATION OF LATER LIFE

J. Bond, *Health and Society, Newcastle University, Newcastle upon Tyne, United Kingdom*

This paper describes different stages of cognitive impairment as routinely used in clinical settings and biomedical research. From a social constructionist perspective the biomedicalisation of cognitive impairment, Alzheimer's disease and other dementias highlights 'boundary' issues between different stages of the 'condition'. The paper will focus on the meanings of transition between stages from the perspective of different stakeholders focusing on the early stages: normal age-related cognitive impairment ('normal ageing'), pre-MCI, MCI and a formal diagnosis of Alzheimer's disease or other dementia. The impact of labelling different stages along the clinical pathway has psychosocial and political consequences for people with cognitive impairment, their family members, and formal and informal caregivers, particularly at the point of transition between stages. Using insights from qualitative interviews from studies of early cognitive impairment in the UK, the importance of recognising different perspectives and identifying positive as well as negative consequences will be discussed.

MAKING PLANS FOR THE UNKNOWN: OLDER PEOPLE'S VIEWS OF MAKING PLANS FOR LATER LIFE IN ENGLAND UNDER THE FRAMEWORK OF THE MENTAL CAPACITY ACT

J. Manthorpe, K. Samsi, *Social Care Workforce Research Unit, Kings College London, London, United Kingdom*

The Mental Capacity Act 2005 implemented in England and Wales in 2007 provided a new framework for consideration of decisions if mental or physical capacity were affected. Options exist for choices of substitute decision-makers for welfare and financial matters, for the drawing up of statements of wishes and for the production of advance decisions about refusal of care and treatment. Little is known about older people's views and knowledge of these mechanisms and their experiences. This paper draws on a set of interviews with 40 community-dwelling older people from a range of diverse backgrounds living in the London area to explore their perceptions and intentions. Findings reveal that knowledge is limited, that there is reluctance among some to making arrangements in advance and that professional information and guidance have only partial impact. Theoretically 'good ideas' do not always translate into personal belief systems and contexts.

PATHWAYS TO DIAGNOSIS: CANADIAN CROSS-CULTURAL EXPERIENCES OF THE PREDIAGNOSIS PERIOD OF ALZHEIMER'S DISEASE

N. Drummond¹, S. Koehn², C. Cohen³, V. Emerson⁴, L. Garcia⁵, K. Leung¹, M. Persaud⁶, L. McCleary⁷, 1. *University of Calgary, Calgary, Alberta, Canada*, 2. *Centre for Healthy Aging at Providence, Vancouver, Alberta, Canada*, 3. *Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada*, 4. *Acuity Research Group Inc, Ottawa, Ontario, Canada*, 5. *University of Ottawa, Ottawa, Ontario, Canada*, 6. *University of Toronto, Toronto, Ontario, Canada*, 7. *Brock University, St Catherine's, Ontario, Canada*

Cultural influences are important when patients encounter their health system. There is some evidence that the early diagnosis and management of Alzheimer's disease may lead to improvements in health status and quality of life, but there is also anecdotal evidence suggesting that some cultural groups may view memory and cognitive function loss as not requiring treatment. We report a comparative retrospective study of four Canadian cultural/linguistic groups (Euro-Canadian English speakers, Euro-Canadian French speakers, Indo-Canadians and Chinese-Canadians) to identify how Alzheimer's disease is experienced and responded to in the period preceding diagnosis. Open-ended, ethnographic interviews in the appropriate languages were undertaken with people recently diagnosed with Alzheimer's disease and their main caregivers. Knowl-

edge of beliefs about, and approaches to, the pre-diagnostic period of Alzheimer's disease across different Canadian cultural/linguistic groups will contribute to professional education, health system, and health and social policy changes aimed at improving pre-diagnostic management and diagnostic procedures.

COGNITIVE STATUS AND TRANSITIONS IN FUNCTION OVER 1 YEAR IN A TRI-ETHNIC URBAN COHORT

S.M. Albert¹, J. Bear-Lehman², A. Burkhardt³, *1. Behavioral & Community Health Sciences, University of Pittsburgh, Pittsburgh, Pennsylvania, 2. New York University, New York, New York, 3. Long Island University, New York, New York*

Objective: To examine whether white, African-American, and Hispanic elderly face a similar risk of functional decline over 1 year, adjusting for initial cognitive status. **Sample:** 300 Medicare beneficiaries with mild disability drawn from a population-based study in New York City. **Measures:** Participants were assessed twice, one year apart. Cognitive assessment at baseline (bilingual battery) assigned participants to normal (79%) or mild cognitive impairment/mild dementia (21%) status. Disability status was based on occupational therapist (OT) ratings of whether respondents were able to live alone or needed minimal-to-moderate help (29.2% at baseline, 34.2% at 1 year). OT's were blind to respondent cognitive status. **Results:** The sociocultural groups did not differ in age or gender; the mean age of respondents was 78.8 and 71% were women. OT ratings across ethnic groups did not differ in ANOVA models that adjusted for age and cognitive status. However, minority elderly were at increased risk of greater OT-rated disability at follow-up in logistic regression models that adjusted for cognitive status, age, gender, and initial OT-rated disability status (OR 2.7, African-American; OR 2.1, Hispanic). **Discussion:** Minority elderly are at increased risk of disability transition even in models that adjust for cognitive status.

SESSION 360 (SYMPOSIUM)

TRANSPORTATION & MOBILITY AS A CREATIVE APPROACH TO HEALTHY AGING

Chair: S. Classen, *University of Florida, Gainesville, Florida*

Discussant: D.W. Eby, *University of Michigan Transportation Research Institute, Detroit, Michigan*

Transportation mobility is a basic human need for people of all ages and it underlies most aspects of healthy aging for older adults. It is essential to their independence, autonomy, and quality of life as it provides an opportunity to stay engaged in their community and participate in activities that enhance their well being. Thus, it is not surprising that the 'identification of older adult transportation options' was voted the third highest priority by delegates at the recent White House Conference on Aging, with only reauthorization of the Older Americans Act and the development of a comprehensive and coordinated strategy for affordable and accessible long term care rating higher. Two complementary but interdependent goals have emerged with respect to transportation mobility for older adults: to help those who are able to drive safely continue to do so; and to identify and provide community mobility support to those who are no longer able to or choose not to drive. This symposium explores several important topics that have significance for achieving these goals including: (1) the impact of aging on driver safety and the adverse consequences associated with stopping driving; (2) the transitioning process from driving to non-driving and how it can be facilitated to reduce the burden on older adults and their families; (3) promising initiatives for promoting safe driving for those who are still able and choose to continue driving; and (4) promising initiatives for mobility management of other community transportation options when driving is no longer possible or desired.

DRIVING MOBILITY AND SAFETY AMONG OLDER ADULTS

L.J. Molnar, *Transportation Research Institute, University of Michigan, Ann Arbor, Michigan*

In American society and elsewhere, transportation mobility has become synonymous with being able to operate an automobile. In fact, driving is so embedded into the fabric of contemporary life that the idea of losing one's driving privileges is inconceivable for many older adults. Thus, it is not surprising that many older adults are reluctant to stop driving and few plan for the time when they will no longer be able to drive. Yet declines in functional abilities associated with medical conditions that become more prevalent with age, and the medications used to treat these conditions, may compromise the ability to drive safely. This presentation explores issues related to the importance of transportation mobility in the lives of older adults, as well as the implications of aging on driving safety. Of particular interest are the risks of crash involvement and injury of older drivers relative to younger drivers.

PROMISING INITIATIVES FOR PROMOTING SAFE DRIVING

S. Classen, *University of Florida, Gainesville, Florida*

As the U.S. population ages, older driver safety may evoke public health concern. Older drivers however are generally safe as a group, but they may need interventions or adaptations (e.g. on the person, vehicle, environment or systems level) to keep them on the road longer and safer. Recent studies have shown that promising initiatives exist to promote safe driving for those who are still able and choose to continue to drive. This presentation will highlight some of these promising approaches by focusing on four main areas, which include: (1) the person (e.g., the safety benefits of driver evaluation and rehabilitation programs); (2) the vehicle (e.g. use of in-vehicle technologies to promote safety on the road); (3) the roadway system (e.g. enhanced intersection and roadway design to promote safer driving); as well as (4) the system (e.g., licensing policies and model federal and state programs to enhance older driver safety).

PROMISING INITIATIVES FOR MOBILITY MANAGEMENT

J.E. Burkhardt, *Westat, Rockville, Maryland*

The need to develop and support transportation options for older persons who are no longer able to or choose not to drive is widely recognized. Each year, an estimated 600,000 adults age 70 and older stop driving in the US and become dependent on others to meet their transportation needs. Study findings suggest that older adult men will need about 7 years of transportation support compared to about 10 years for women. Alternate transportation options available for older adults include public and para-transit services, private and specialized transportation services, and agency transportation services. A broad array of transportation options is needed in most communities. This presentation will explore promising initiatives for the mobility management of these transportation options, an innovative approach for managing and delivering coordinated transportation services to older adults.

THE TRANSITIONING PROCESS FROM DRIVING TO NON-DRIVING

B.M. Dobbs, *Family Medicine, University of Alberta, Edmonton, Alberta, Canada*

At some point in the life course, many older adults will be faced with the necessity of having to reduce or stop driving. Due to the saliency of driving, restrictions in driving and particularly driving cessation, often are very difficult for the individual and are frequently an ongoing and emotional stressor for family members. Other adverse outcomes include reductions in mobility, a loss of independence, as well as reductions in quality of life and well-being. This presentation examines the reasons that older drivers reduce or stop driving, the process they go through, and current and promising new approaches available to assist older adults

transition smoothly from driving themselves to relying on other community mobility options.

SESSION 365 (PAPER)

WORKING FOR WELL-BEING

ECONOMIC CRISES: IMPACT ON OLDER WORKERS' HEALTH AND WELL-BEING

M. Pitt-Catsouphes, C. Matz-Costa, *Boston College, Chestnut Hill, Massachusetts*

Paid work has been recognized as one dimension of productive aging and there is evidence supporting the positive relationship between health/well-being and employment in older adults. The importance of paid work is particularly salient during today's economic downturn when financial constraints can lead to a downward spiral in older adults' quality of life, both in terms of financial resources as well as access to important benefits and social supports. We used data from the Age & Generations Study gathered before and after the onset of the 2008 economic crisis to examine the quality of employment experienced by older workers in 9 different organizations. A repeated measures analysis of variance was used to examine differences between 650 participants' survey responses collected at Time 1 (November 2007 to March 2008) and at Time 2 (May to September 2008), including approximately 150 workers age 53 and older (older Boomers/ Traditionalists). Overall, we found that employee engagement and job security decreased between Time 1 and Time 2, however physical and mental health were found to be relatively stable. There was a significant interaction effect between engagement and age, however, such that as employees got older the differences between their engagement scores across the two time points became smaller. Findings suggest that the economic crisis has indeed had an impact on the employment experiences of workers—even in its very early stages—and in some cases, the degree of this impact differs across age/generation.

THE PREVALENCE, DISTRIBUTION, AND MENTAL HEALTH CORRELATES OF PERCEIVED JOB DISCRIMINATION AMONG OLDER WORKERS IN THE UNITED STATES

R.J. Chou¹, N.G. Choi², 1. *Social Work, University of South Carolina, Columbia, South Carolina*, 2. *University of Texas, Austin, Texas*

Although job discrimination negatively impacts on health and mental health, very little attention has been given to job discrimination perceived by older workers and how job discrimination affects their mental health. Based on a sample of 1,386 workers age 50 and older from "Midlife in the United States II" (MIDUS II), this paper intends to bridge the gap in existing literature. First, this paper provides a descriptive analysis of the prevalence and distribution of job discrimination in terms of age, gender, race/ethnicity, education, industry, and occupation. Secondly, this paper looks into: (1) effects of job discrimination on mental health (depression and well-being) and (2) how social support from spouse, other family members, friends, supervisors, and coworkers alleviate the effects of job discrimination on mental health. It is hypothesized that (1) job discrimination negatively affects mental health, and (2) social support from spouse, other family members, friends, supervisors, and coworkers help to alleviate the effects of job discrimination on mental health. Hypothesis 1 was fully supported by results from regression analyses. Hypothesis 2 received mixed support. Spouse support turned out to be the strongest in alleviating the effects of job discrimination on mental health, followed by support from other family members and friends, whereas supervisor support and coworker support have no effects. This study represents a first study using a national random sample to study job discrimination perceived by older workers. The findings contribute to advancing our knowledge. Recommendations for social policy and social work practice are also discussed.

PRODUCTIVE AGING AT WORK: UNDERSTANDING FACTORS THAT PROMOTE OR IMPEDE ENGAGEMENT IN WORK ROLES

C. Matz-Costa, M. Pitt-Catsouphes, *Boston College, Sloan Center on Aging & Work, Chestnut Hill, Massachusetts*

The recent economic recession, among other factors, has led to the reality that many older people will have to remain in the paid labor force longer than what they had planned—perhaps much longer. Vestiges of 20th century employment structures and biased attitudes, however, can make it difficult for older workers to secure employment that meets their needs and priorities. As the productive aging paradigm argues, in order for adults to fully and meaningfully engage in productive activities as they age, it is of critical importance that we gain a better understanding of the various factors (age-related and contextual) that may be promoting or impeding individuals' ability to engage in productive roles, including paid work roles. In this presentation I will share findings from the 2007/2008 Age & Generations Study that explore the impact of various age-related and workplace-related factors on the work engagement of 2,210 employees within 9 US organizations. Given the nested nature of the data, multi-level modeling was used. Among other findings that will be presented, we found that having access to a greater number of flexible work options was positively related to engagement, after controlling for several personal, family, and job characteristics, however this effect became weaker as employees got older. The results indicate that having access to a variety of flexible work options may be an important driver of work engagement for employees in general, but it may become less of a driver as workers get older.

LET EXPERIENCE WORK: DETERMINANTS OF RETAINMENT AND RE-EMPLOYMENT OF OLDER WORKERS IN THE NETHERLANDS

K. Karpinska¹, K. Henkens², J. Schippers¹, 1. *Utrecht University, Utrecht, Netherlands*, 2. *NIDI (The Netherlands Interdisciplinary Demographic Institute), The Hague, Netherlands*

Many Western societies face aging of the labor force and consequently, shortages on the labor market. The question arises as to which extent older employees would be given the chance to remain on the labor market or to return to the professional career. Various studies on the Dutch labor market show that employers value older workers' experience and reliability. Yet, not many decide to retain or re-employ them. In this study we aim at explaining which individual and organizational characteristics affect the chances of the older employee to remain active on the labor market. To answer this question, a vignette study among Dutch employers was conducted. Profiles of hypothetical employees and retired job applicants were presented to the employers who were asked to make a specific employment decision (retention or hiring, respectively). The results show an asymmetry in factors influencing retaining and hiring of older workers. Human capital and older workers' motivation are important predictors of retention. Hiring older workers depends to a large extent on organizational forces such as personnel shortages and the age of the retiree.

SESSION 375 (SYMPOSIUM)

CAN WE MEASURE BIOLOGICAL AGE?

Chair: A. Mitnitski, *Medicine, Dalhousie University, Halifax, Nova Scotia, Canada*

Discussant: K. Rockwood, *Medicine, Dalhousie University, Halifax, Nova Scotia, Canada*

Aging is fundamentally a biological process, which can be measured on a calendar scale. Despite the lack of a clear definition, the concept of biological age – as distinct from the simple passage of time (chronological age) – is very appealing. Biological age is like a clock that ticks at different rates among different individuals and likely too at different rates over different observation periods, even for the same individuals.

Although the concept of biological age is attractive, how to measure biological age is controversial. One possible approach uses age-specific trajectories of biomarkers. Any individual's biological age can be assessed by comparing that individual's biomarker value with some standard reference. But the trajectories of different biomarkers vary significantly from each other, so that none can be considered as the criterion referent (sometimes called the "gold standard"). In this symposium, we discuss how to integrate various biomarkers rather than to focus on just one, or even a few. "Biomarkers" are considered broadly, and can even include routinely collected clinical data, as long as they conform to certain characteristics. The symposium will consider what such characteristics might be, and which determinants (including early determinants) influence the expression of biomarkers. More broadly, we will consider how biological age is related to physical laws (e.g. increasing entropy). Even tentative conclusions about the reliable measurement of biological age have broad health care and social implications. One of these – standard versus individual retirement ages – will be discussed, in a session that invites audience participation.

BIOLOGICAL AGE IN RELATION TO THE FRAILTY INDEX

K. Rockwood, A. Mitnitski, *Medicine, Dalhousie University, Halifax, Nova Scotia, Canada*

The Frailty Index integrates many symptoms, signs, laboratory measurements, etc. called deficits. Its mean value changes characteristically with age and is strongly associated with mortality. It also shows the Markov property - knowledge of the most recent value of the Frailty Index allows accurate prediction of death, and knowledge of its prior values does not improve the accuracy of that prediction. Using the age specific trajectory of the mean value Frailty Index as a reference, in principle, an individual's biological age can be calculated as the chronological age at which the mean value of the Frailty Index corresponds to their observed value. Frailty Index measures developed to date typically have employed a relatively small number (<40) of health characteristics. Including more characteristics (e.g. biological measures) might increase the power of the Frailty Index to predict an individual's chance of death, a key requirement of any estimate of biological age.

BIOLOGICAL AGE AND EXCEPTIONAL LONGEVITY

L. Gavrilov, N. Gavrilova, *NORC, University of Chicago, Chicago, Illinois*

The concept of biological age implies that it is very promising to study individuals with slow aging, which allows them to survive to exceptional age of 100 years and above. The study is based on statistical analysis of life histories of American centenarians, taken from the U.S. Social Security database and recorded family histories, and then validated through cross-checking with U.S. early censuses, military draft registration cards and other data resources. Persons with exceptional longevity are then compared to 'normal' individuals with average lifespan, using method of conditional logistic regression, to see which characteristics are predictive for exceptional longevity. Special attention is paid to the role of early-life and mid-life events and conditions in shaping the pattern of human resilience and exceptional longevity. The role of familial longevity for survival to age 100 is also explored. Overall, more than 500 centenarians are studied, with predictor variables including body height, body weight, parental age at person's birth, occupation and race/ethnicity.

PHYSIOLOGICAL CHANGES DURING THE LIFE COURSE: INSIGHTS FOR AGING, HEALTH, AND LONGEVITY

A.I. Yashin, K.G. Arbeev, I. Akushevich, S.V. Ukraintseva, A. Kulminski, L. Arbeeveva, I. Culminskaya, *Sociology, Durham, North Carolina*

Indices describing individuals' physiological states change with age and modulate morbidity and mortality risks. In this paper we investigate regularities of changes in a number of such indices measured in the Framingham Heart Study. The structure of available data allows for com-

parison of cross-sectional and longitudinal average age patterns of respective indices. Such a comparison reveals the presence of substantial cohort effects in the age trajectories of physiological state. The analyses of longitudinal data allows for evaluating dynamic properties of risk functions. The new approach to statistical analyses of such data allows for using information about aging obtained in other studies. We found that interpretation of physiological age trajectories, minimizing mortality risk as age dependent physiological norms is useful for indirect evaluation of the effects of persistent external disturbances on morbidity and mortality risks. The role of physiological indices in manifesting the aging process is discussed.

SYSTEMIC BIOLOGICAL ROLE OF THE BETA2-ADRENERGIC RECEPTOR GENE POLYMORPHISMS IN HEALTHY AGING

A. Kulminski, I. Culminskaya, S.V. Ukraintseva, K.G. Arbeev, K. Land, A.I. Yashin, *Center for Population Health and Aging, Duke University, Durham, North Carolina*

Genetic diversity is one of the most important sources limiting practical significance of biomarkers of aging. On the other hand, aging phenotypes are not yet well-defined. To better understand the process of biological aging systemic analyses of genetic and non-genetic markers of aging are required. We studied associations of two common polymorphisms of the beta2-adrenergic receptor (ADRB2) gene, Arg16Gly and Gln27Glu, with risks of broad range of aging-related phenotypes including cancer, selected cardiovascular diseases, and longevity, in the Framingham Heart Study Offspring cohort. We show that the Gln27Glu polymorphism appears to be a genetic marker of broad range of these complex aging phenotypes. We discuss systemic role of these two polymorphisms, as well as their haplotypes and compound genotypes, along with physiological biomarkers (e.g., blood pressure, serum cholesterol) in healthy life. We also discuss modes of inheritance of aging phenotypes for the ADRB2 gene polymorphisms.

SESSION 380 (POSTER)

COGNITION/DEMENTIA

EMERGING EVIDENCE FOR MEMORY TRAINING WITH COMMUNITY-RESIDING MINORITY OLDER ADULTS

G.J. McDougall, H.A. Becker, K. Pituch, T.W. Acee, P.W. Vaughan, C.L. Delville, *School of Nursing, University of Texas at Austin, Austin, Texas*

Research Objective. To evaluate whether a memory training intervention would produce differential benefits in older adults with age-associated cognitive decline. Design: A Phase III randomized trial between 2001-2006. Of those eligible, 265 older adults were assigned to either twelve hours of a memory training or general health training. Randomization occurred within the eleven separate groups, which met at nine different sites in the community, such as senior centers. Findings: The sample was 79% female, 71% Caucasian, 17% Hispanic and 12% African-American. On memory performance, 47% of the participants scored Poor, 28% Normal and 25% in the impaired range, even though none had dementia. Memory performance changed differently over time based on the demographic characteristics of the participants regardless of whether they were in the memory or health training groups. Compared to Whites, both Hispanics and Blacks performed better on visual memory; Blacks performed better overtime on instrumental functional abilities and Hispanics performed better on global cognition. Conclusion: Both interventions facilitated the maintenance of cognitive and functional ability. Given the body of compelling evidence on memory training with Caucasian samples, for translation to occur across settings numerous conditions must be satisfied. Specifically, the distinctive characteristics of reach (representative sample), effectiveness (feasibility), adoption (multiple settings), implementation (variety of staff) and main-

tenance and cost (setting-level vs. individual-level) would need further elaboration. Before the translation of memory training could be implemented in the community with a minority population, a large homogeneous and highly motivated sample would need to be recruited for a Phase III randomized clinical trial.

ILLNESS PERCEPTIONS IN OLDER ADULTS WITH MILD COGNITIVE IMPAIRMENT: A FEASIBILITY STUDY

F. Lin¹, C. Gleason², S.M. Heidrich¹, 1. School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin, 2. School of Medicine and Public Health, University of Wisconsin-Madison, Madison, Wisconsin

Mild Cognitive Impairment (MCI) is defined as the transitional stage between the cognitive decline of normal aging and fully developed dementia. Little is known about patients' understanding of a diagnosis of MCI. The Leventhal's Common Sense Model (CSM) posits that people have specific beliefs about an illness and that these beliefs drive their coping behaviors. The purposes of this descriptive, pilot study were to 1) explore the feasibility of using structured, self-report scales to measure beliefs about MCI (illness perceptions) in MCI patients, 2) describe their illness perceptions, and 3) explore the relationships between illness perceptions and awareness of cognitive deficits. Eleven MCI patients (age: 71 – 86, MMSE: 23 – 30) completed self-report scales measuring 7 domains of illness perceptions (Illness Perception Questionnaire-MCI) and awareness of cognitive deficits (IQCODE). Five participants conducted a 15-minute cognitive interview to explore responses to the IPQ-MCI. Participants spent average 30 minutes on completing the IPQ-MCI. All participants felt the instruments were "somewhat" or "very" easy to understand and covered important topics. Results of the cognitive interviews suggested that participants understood the items. Participants correctly identified most of the symptoms related to MCI, attributed MCI to aging, perceived that MCI was chronic, predictable, has negative consequence, but is controllable, understandable and did not cause psychological distress. 4/11 participants were categorized into having low level of awareness. Future research should examine the relationship between illness beliefs and coping with MCI.

COLLABORATIVE DEMENTIA TREATMENT MONITORING PROGRAM IN HOME BASED PRIMARY CARE

B. Hicken^{1,2}, L. Dixon¹, P. Kithas^{1,2}, B. Bair^{1,2}, 1. George E. Wahlen Department of Veterans Affairs Medical Center, Salt Lake City, Utah, 2. University of Utah, Salt Lake City, Utah

Four medications are routinely used for dementia: donepezil, memantine, galantamine, and rivastigmine. The clinical significance of these medications on the symptoms of dementia are hotly debated. There are no standardized, practical methods to help clinicians monitor treatment effectiveness in the clinic setting. This demonstration project evaluated a program to monitor the clinical efficacy of anti-dementia medications in patients enrolled in the VA's Home Based Primary Care Program. Eligible patients were taking ≥ 1 anti-dementia medication and had a reliable caregiver. The staff clinical psychologist interviewed the caregiver using a modified form of the Clinical Impression of Global Change (CIBIC) Plus Care Giver Input tool. With caregiver consent, and in consultation with the patient's primary care provider, patients underwent a trial of monitored medication discontinuation consisting of 1-2 weeks off the targeted anti-dementia drug while being monitored with the CIBIC Plus. If a noticeable decline occurred, the medication was restarted. Sixteen monitored medication discontinuations were attempted in 14 patients. Ten (63%) patients had no noticeable decline in cognition after discontinuing the medication. Six (37%) experienced a noticeable decline in cognition and resumed taking the discontinued medication. Estimated annual savings based on ten successful trials was \$9,734.55. Outcomes suggest that effectiveness anti-dementia medications can be determined from short-term discontinuation in individual patients. Since these medications are FDA-approved for relief of symptoms of dementia, tracking symptoms from a caregiver perspective pro-

vided reliable information concerning patient benefit. A structured approach to monitoring patient response to these medications results in improved care and cost savings.

GENDER DIFFERENCES IN NEUROCOGNITIVE RESERVE IN ELDERLY

B. Carlson^{1,2}, V.J. Neelon^{1,2}, J. Carlson¹, M. Hartman³, 1. School of Nursing, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. Biobehavioral Laboratory, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 3. Institute on Aging, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Purpose: Neurocognitive reserve refers to physiological mechanisms which allow the brain to cope with neuropathology. Studies suggest that women are at greater risk for cognitive decline because they have less reserve than men. In this study, we examined how respiratory periodicity, a marker of neurocognitive reserve, moderates the relationship between cerebral oxygenation during sleep and cognitive function in men and women, age 70+ years. **Methods:** Subjects (74F, 41M) underwent standard polysomnography including cerebral oximetry (percent cerebral oxyhemoglobin saturation- $rcSO_2$) and inductance plethysmography (respiratory periodicity). A cognitive test battery was administered 1 week prior to each study and included tests of delayed memory (logical memory [LM], visual reproduction [VR]) and executive control (Stroop Color Word [SCW] and the Digit Symbol Modalities test [DSMT]). Student t tests and correlational analyses examined how respiratory periodicity and $rcSO_2$ during sleep, and cognitive function differed in men and women. **Findings:** Compared to men, women had lower $rcSO_2$ levels ($58.2\% \pm 7.4\%$ vs. $65.3\% \pm 6.3\%$, $F_{(1,114)} = 26.35$, $p < .0001$) and have less respiratory periodicity (35% vs. 59% , $F_{(1,114)} = 10.7$, $p < .005$) during sleep. While no significant relationships were found in men, lower $rcSO_2$ levels in women was associated ($p < .01$) with lower cognitive function ($r_{LM} = .32$; $r_{VR} = .31$; $r_{SCW} = -.31$; $r_{DSMT} = .38$). However, the relationship between $rcSO_2$ and cognitive function was only significant in women with low respiratory periodicity during sleep ($r_{LM} = .37$; $r_{VR} = .31$; $r_{SCW} = -.42$; $r_{DSMT} = .42$). **Conclusions:** In women, lower cognitive function was associated with lower $rcSO_2$ and low respiratory periodicity during sleep, suggesting that women may have lower neurocognitive reserves than men. **Support:** NRO8032, R00046

EFFECTS OF DUAL MOTOR AND COGNITIVE TASKS WITH GRASP IN YOUNG AND OLDER ADULTS

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The ability to maintain grasp force in one hand while performing other tasks is frequently required in daily tasks, such as tying a shoelace or unscrewing a jar lid. Older adults show difficulty processing dual visual and cognitive tasks (Hein & Schubert, 2004). However, there is limited information about how older adults perform dual motor tasks or motor-cognitive tasks. 15 young and 15 older adults participated in this study. Participants produced a firm force with either hand for approximately 12 seconds. During the middle 4 seconds of this period the participant was asked to perform either a simple or complex cognitive or motor task on command. A significant decrease in grasp force during concurrent complex motor but not cognitive tasks was shown in both young and older adults.

KNOWLEDGE AND IMAGE OF DEMENTIA AMONG COMMUNITY-DWELLING ELDERLY PEOPLE

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Purpose: In 2008, the elderly constituted approximately 22.0% of the Japanese population, and the prevalence of dementia is anticipated to increase along with the elderly population. However, there is inadequate information regarding dementia. The purpose of this study was

to examine the general images about dementia, Method: Questionnaires were administered to 182 participants among community dwelling elderly people in Japan. The questionnaire consisted of questions on demographic characteristics, images of dementia, knowledge about dementia, anxiety toward developing dementia. Result: A total of 68.1% of respondents had the image that dementia was a natural part of the aging process, and that it was a severe disease (68.2%), that it was sorrowful disease (65.4%), and that it was incurable disease (57.1%). Moreover, 46.7% of respondents felt resistance to visiting a clinic, although 40 % of these respondents did not know about memory clinics. The reason they gave for not going was that they thought that dementia was natural and inevitable part of the aging process (χ^2 test, $p = 0.009$) and that it was an incurable disease ($p < 0.001$). They also felt anxiety toward developing dementia ($p = 0.038$). Conclusions: The results of this study suggest that appropriate education to the elderly regarding dementia may contribute to early treatment and care of the disease, thereby maximizing the effect of therapeutic interventions. Accurate information concerning dementia and of the disease should be provided to relieve anxiety about the disease.

CURRENT SCIENTIFIC UNDERSTANDING OF RESISTIVENESS TO CARE: A CONCEPT ANALYSIS

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Alzheimer's disease affects the lives of millions of people, progressively diminishing the person's cognitive capacities which prompt resistance and refusal of care. To gain foundational understanding of this concept a principle-based concept analysis method was utilized applying the four analytic principles based in the philosophy of science: epistemological, pragmatic, linguistic, and logical. Data consisted of 35 articles published in the scientific literature. Findings revealed gaps in scientific understanding, including inconsistencies in definition and close associations with the concepts of agitation and aggression. Most often, only those resistive behaviors that escalated to agitated or aggressive responses were addressed in the current literature. In addition, a paucity of literature was found examining resistive behaviors in the context of home-based care. By understanding the concept of resistiveness to care and its impact on family caregivers, nurses will be better prepared to offer supportive interventions to sustain family caregivers-our instrumental partners in care.

THE ASSOCIATION OF PERSONALITY DOMAINS AND COGNITIVE FUNCTION: FINDINGS FROM THE HEALTH ABC STUDY

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Background: Personality is known to affect several aspects of health and functioning, but its relationship to cognitive functioning in late life is not well understood. This study prospectively examined the association between openness to experience and conscientiousness, two personality traits that we hypothesized would be associated with better cognitive function and less decline over time. Methods: We studied 924 well-functioning elderly with personality measures on openness and conscientiousness (analyzed by low, mid, and high scores) from the Health ABC Cognitive Vitality substudy. Random effects repeated measures models assessed whether each personality trait was associated with baseline cognitive function and 5-year change in cognitive function.

Logistic regression models were used to examine the association between each trait and clinically significant cognitive decline, and the joint effects of both traits on cognitive decline. Results: At baseline, the mean age was 75.2 (± 2.7) years, 446 (48.3%) participants were black, and 464 (50.2%) were female. For conscientiousness, 244 people (26.4%) had low, 338 (36.6%) had mid and 342 (37.0%) had high scores; for openness, 288 people (31.2%) had low, 323 (35.0%) had mid and 298 (32.3%) had high scores. Conscientiousness and openness were individually associated with baseline cognitive function, as measured by the Modified Mini Mental State Examination (3MS) (p -value = 0.05 and < 0.01). Those with high conscientiousness or high openness had decreased risk of cognitive decline (Odds ratio [OR]=0.60; 95% Confidence Interval [CI]=0.37, 0.97 and OR=0.61; 95% CI=0.38, 1.00). Those with high scores on both traits had an even greater decreased risk of cognitive decline (OR=0.42; 95% CI=0.19, 0.92). Conclusions: Conscientiousness and openness associated with higher baseline cognitive function and a decreased risk of cognitive decline over five years. Further research is needed to assess possible mechanisms of this association. NIA contract #: N01-AG-6-2101, N01-AG-6-2103, N01-AG-6-2106 This research was supported in part by the Intramural Research Program of the NIH, National Institute on Aging.

NON-PHARMACOLOGICAL APPROACHES TO BEHAVIORAL SYMPTOMS IN NURSING HOME RESIDENTS: STAFF PERSPECTIVES

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PURPOSE: To obtain nursing home staffs' perspectives on the types of behavioral symptoms they find dangerous or difficult to manage in nursing home residents with dementia, the approaches they find effective for managing these behaviors, and the barriers they identify to use of non-pharmacological interventions. METHODS: six focus groups conducted with a mix of medical directors ($n=5$), licensed nurses ($n=10$), activity personnel ($n=8$), nursing assistants ($n=7$) and others ($n=5$) from sites in North Carolina and Pennsylvania. A structured interview guide was used. Sessions were audio-recorded and transcribed verbatim. Data were analyzed using content and thematic analysis. RESULTS: Staff identified wandering and confusion as the most dangerous behaviors encountered. The changing landscape is a significant contextual factor influencing care in nursing homes. Major goals for care were to calm the resident and to control the behavior. Staff voiced that knowing the resident can help "normalize the environment." They used interpersonal approaches and drugs for aggressive behaviors, and recreational activities for passive behaviors. Strategies were implemented in a trial and error fashion. Staff identified their need for more education on non-pharmacological approaches to care. CONCLUSIONS: Consensus statements urge the use of non-pharmacological interventions for behavioral symptoms but there is a lack of theory to guide practice. Staff continues to identify behavioral control as a major goal of care and feels ill equipped to implement non-pharmacological measures. A framework for the study of vulnerable populations is proposed that supports the types of behaviors for which these interventions are most effective and the conditions under which they produce positive outcomes.

THE FEELING TONE QUESTIONNAIRE (FTQ) AND ITS PSYCHOMETRIC PROPERTIES: ASSESSING DEPRESSIVE SYMPTOMS IN DEMENTIA AND IN COMMUNICATION-IMPAIRED OLDER PERSONS IN LONG TERM CARE FACILITIES

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This research aimed at developing a means of uncovering the subjective inner life of persons who are seriously limited in their ability to communicate feelings of distress associated with depression and other affective disorders. These analyses further developed a reliable and valid

measure of affective disorder in communication-impaired elderly demented patients. The FTQ builds upon the existing knowledge in the field of assessment of depression in dementia by combining a direct assessment focus and clinical observation method and adding behaviorally anchored ratings of affect, or feeling-tone. It consists of 16 questions and 16 corresponding observation ratings of affect and was specifically designed for use with the communication impaired demented patient. The FTQ uses standardized questions with simple wording. The total sample size was 764 respondents from four samples of respondents in New York City and upstate New York nursing homes and a psychiatric hospital. The mean age of the combined sample was 84. Internal consistency reliability and interrater reliability were good across all four samples, as was test-retest reliability. Concurrent convergent construct validity and discriminant validity coefficients were generally high. Criterion-related validity was provided in two samples utilizing DSM ratings by geriatric psychiatrists. These findings provide support for the view that the FTQ works well as a method of facilitating the recognition of depressive signs in the more severely communication impaired group of demented older persons.

BRIEF SCREENING TOOL FOR MILD COGNITIVE IMPAIRMENT IN OLDER JAPANESE: VALIDATION OF THE JAPANESE VERSION OF THE MONTREAL COGNITIVE ASSESSMENT

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[Purpose] The Montreal Cognitive Assessment (MoCA), developed by Nasreddine, et al (2005) is a brief cognitive screening tool for detecting older people with mild cognitive impairment (MCI). We examined the validity and reliability of the Japanese version of the MoCA (MoCA-J) in older Japanese. [Subjects & Method] Subjects were recruited from the outpatient memory clinic of Tokyo Metropolitan Geriatric Hospital or community-based medical health check-ups in 2008. The MoCA-J, a Japanese version of the Mini-Mental State Examination (MMSE-J), Clinical Dementia Rating (CDR) scale, and routine neuropsychological batteries were conducted to 133 older subjects: mild Alzheimer's disease = 29; MCI = 27; normal controls = 77. [Results] Internal consistency of MoCA-J scores, using Cronbach's alpha was 0.65. Test-retest reliability of MoCA-J scores, using intraclass correlation coefficient between the baseline survey and follow-up at 8 week intervals was 0.71 ($p < 0.001$). MoCA-J scores were found to be highly correlated with MMSE-J scores ($r = 0.759$, $p < 0.001$) and CDR scores ($r = -0.658$, $p < 0.001$). The areas under the receiver operating characteristic (ROC) curves were 0.90 (95% CI, 0.84-0.96) and 0.84 (95% CI, 0.73-0.94) for MoCA-J and MMSE-J groups, respectively. Using a cutoff score of 24/25, the MoCA-J demonstrated a good sensitivity of 86% and a good specificity of 82% for screening MCI. [Conclusion] The MoCA-J could be a useful screening tool for detecting MCI at primary clinical settings or community-based medical health check-ups.

ATTITUDES AND EXPECTATIONS OF TECHNOLOGIES TO MANAGE HIGH RISK WANDERING AND ELOPEMENT IN PERSONS WITH DEMENTIA: AN AUSTRALIAN PERSPECTIVE

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Wandering is aimless and repetitive locomotion that may expose persons with dementia (PWD) to elopement, getting lost and death. This study is an Australian replication of a US study. Cross-disciplinary consensus-based analysis was applied to data from five focus groups (N = 47: cognitively intact LTC residents (5), carers of PWD (11), home care workers (13) allied health professionals and health-focused engi-

neers (7) and RNs (11). Groups received briefing about wandering monitoring and elopement management systems. Consistent with US attitudes, participants in all groups agreed on what a wandering technology should do, how it should do it, and necessary technical specifications. Within each group participants raised the need for a continuum of care for PWD and the imperative for early recognition of potentially dangerous wandering and getting lost when they occur. Global Positioning System elopement management was the preferred option. Interestingly, the prospective value of GPS to recover a lost or eloped wanderer far outweighed privacy concerns, as in the US. A pervasive theme was that technologies need to augment, but cannot replace, attentive, compassionate caregiver presence. A significant theme raised only by Australian carers of PWD was the potential for development of implantable GPS technologies and the need for public debate about attendant ethical issues. Given that 60% or more of over 200,000 Australians and 4.5 million Americans with dementia will develop wandering, there is a pressing need to develop effective locator systems that may delay institutionalization, help allay carer concern and enhance PWD safety.

THE NEUROLOGICAL IMPACT OF ART THERAPY ON DEMENTIA PATIENTS

A.V. Fahr, *Capella University, Mound, Minnesota*

This session will connect Neuropsychology, Neuroscience, and Art Therapy in the treatment of Alzheimer's Disease. Neuropsychology is just beginning to identify modalities that may not only slow down the progression of Alzheimer's Disease, but possibly prevent the onset of a dementia. Certain regions of the brain that are responsible for memory, learning, communication, expression, and language, can be accessed through specific neuropsychological interventions and assessments. Neuroscience is seeking to identify how the brain is capable of creating different neurological pathways as an individual is learning a new skill and/or altering a daily routine. Art therapy is working to find therapeutic ways to assist the dementia patient in maintaining cognitive functioning for as long as possible. In addition, art therapy is attempting to help individuals with dementia to express their emotions through the expressive arts. This session will combine the current findings of neuropsychology, neuroscience, and art therapy to discuss the neurological and psychological results of using art therapy with dementia patients who are suffering from various stages of the disease. It just may be possible for the brain to develop new neuropathways through the use of the imagination in creating art and allow the individual with dementia to find alternative methods of emotional expression, communication, and cognitive processing.

PILOT STUDY OF THE IMPACT OF A NOVEL LIGHTING IN A LONGTERM CARE UNIT DEDICATED TO CARING FOR OLDER ADULTS WITH DEMENTIA

P.A. Higgins^{1,2}, T. Hornick^{1,2}, M. Figueiro³, M.E. Duffy⁴, W. Beers⁴, 1. *Case Western Reserve University, Cleveland, Ohio*, 2. *Cleveland VAMC GRECC, Cleveland, Ohio*, 3. *Rensselaer Polytechnic Institute, Troy, New York*, 4. *GE Consumer & Industrial Lighting, Cleveland, Ohio*

AIMS: Sleep disturbances due to circadian disruption are a significant challenge for demented older adults living in nursing homes. The purpose of this pilot study was to test an unattended nursing home lighting intervention designed to deliver high circadian stimulation (CS) during the day and low CS at night, thus promoting less circadian disruption, improved nighttime sleep, increased daytime wakefulness, and decreased behavior and mood disturbances. INTERVENTION AND METHODS: Our interdisciplinary team installed blue-white lights (specially developed by GE Lighting) that provided high CS in some of the existing ceiling fixtures in the unit's dayroom where all meals and most activities occurred. A timer ensured that the blue-white lighting was on from 8am-6pm, with low CS lighting on the remainder of the time. DATA ANALYSES: Using a pre-post design, actigraph data were analyzed for rest-activity patterns for three male residents, the Neuropsychiatric

Inventory-Nursing Home Version (NPI-NH) measured resident behavior as assessed by nurses, and interviews provided feasibility and acceptance data. RESULTS: Blue-white lighting in the dayroom was well accepted and increased perceived brightness but not glare while increasing CS. There was wide intra-individual and inter-individual variations among the subjects for behavioral indicators of circadian entrainment (sleep/wake, NPI-NH scores). Mean actigraphy data suggest small improvements in nighttime sleep consolidation and inter-daily stability (a measure of coupling between 24-hour light-dark and rest-activity cycles), but they must be interpreted with caution. CONCLUSION: Findings show promise for the development of lighting interventions that increase circadian entrainment and decrease sleep disturbances in nursing home residents.

SESSION 385 (SYMPOSIUM)

EXTENSION OF THE NEED-DRIVEN DEMENTIA-COMPROMISED BEHAVIOR MODEL (NDB) FOR USAGE IN MULTIPLE SETTINGS WITH DIVERSE POPULATIONS

Chair: A.L. Whall, *Oakland University, Rochester, Michigan, University of Michigan, Ann Arbor, Michigan*

Discussant: C. Kovach, *University of Milwaukee, Milwaukee, Wisconsin*

The Need-driven Dementia-compromised Behavior Model (NDB) developed by Algaese, Beck, Kolanowski and Whall, et al, in 1996, has significantly predicted which persons with dementia will develop aggression (Whall, et al, 2008). Recently, however, studies based upon the NDB model, have begun to use it to address persons who are otherwise cognitively compromised. The objective of this symposium is to highlight this expansion of the NDB model, and to identify questions and issues related to such extension and revision. Dunn discusses her program of research on Spirituality as it relates to an extension of the NDB model. Harrison and Ferrari present their research findings on falls in hospitalized older adults due to impulsivity as related to the NDB model expansion. Riley-Doucet presents her research findings on multi-sensory stimulation as it relates to use of the model with persons with dementia in various settings. Whall summarizes her 2008 research findings that were used to develop the WARP II as one outcome and expansion of the NDB Model.

USING THE WARP II TO MODIFY THE NDB MMODEL

A.L. Whall, *School Of Nursing, Oakland University, Rochester, Michigan*

The WARP II (Whall Aggressive Risk Profile) was derived from the Whall, et al (2008) study that tested the NDB model. Taken together the WRAP II uses six Background Factors and two Proximal Factors of the NDB model to target behavioral interventions for aggression in persons with dementia. The WARP II is described along with its usage with Harrison's Preserved Implicit Memory treatment and Riley-Doucet's Multiple Environmental Stimulation approach.

SPIRITUALITY AS A BACKGROUND FACTOR

K.S. Dunn, *Oakland University, Rochester, Michigan*

Holistic models that encompass bio-psycho-social and spiritual factors have been found to be effective in meeting the health care needs of older adults. Although comprehensive in nature, the Needs-Driven Behavior (NDB) model is lacking in spiritual background factors that may explain disruptive behaviors among patients with dementia (PWD). These spiritual factors may include the need to feel connected and loved. There is a growing body of empirical evidence that suggest religious activities, which have been practiced repetitively over the lifespan, can elicit comforting, emotional responses and increase meaningful environmental interactions among people with moderate to severe dementia. Therefore, emotions that are connected to religious activities can act as a primer and be an implicit source of comfort and joy for

PWD and therefore, decrease NDBs. Thus, the purpose of this presentation is to build a more holistic NDB model by adding spirituality as a background factor.

EXTENSION OF THE NDB MODEL THROUGH MULTISENSORY ENVIRONMENT INTERVENTIONS

C.K. Riley-Doucet, *Nursing, Oakland University, Rochester, Michigan*

Sensory deprivation is a significant problem among patients with dementia. An inevitable consequence of dementia is functional impairment, which can often lead to increased disorientation, anxiety, dependence in self-care activities, and loss of the ability to use the physical environment to satisfy the basic need for sensory stimulation. The Needs Driven Behavioral (NDB) model integrates the antecedents from the pathophysiological, psycho-behavioral, and environmental perspectives to explain agitated behavior in persons with dementia (PWD) as a symptom of an unmet need. Due to their dementia-related cognitive impairment, the PWD has limited decision-making capabilities and therefore may suffer the loss of environmental control to meet their need for sensory stimulation. This presentation outlines how multisensory environment (MSE) interventions offer PWD a balance between sensory deprivation and sensory overload. Aspects of Riley-Doucet's research and how MSE can be used as an extension of the NDB model will be discussed.

PREDICTIVE FACTORS ASSOCIATED WITH IMPULSIVITY RELATED FALLS IN HOSPITALIZED, OLDER ADULTS

M. Ferrari¹, B.E. Harrison¹, J. Wulfr³, C. Campbell², M.E. Maddens², A.L. Whall¹, *I. Nursing, Oakland University, Rochester, Michigan, 2. William Beaumont Hospital-Royal Oak, Royal Oak, Michigan*

Fall prevention for hospitalized older adults needs to be tailored to risk profile. The purpose of this study was to determine predictive factors for impulsivity related falls (IRF) in hospitalized, older adults in a large suburban hospital. A previous study found a significant relationship between inattention and IRF among older adults. This retrospective study sample (N = 395) included patients age 65 years and older who had a documented in-patient fall in 2008. Measures included Confusion Assessment Method (CAM) and Safety Assessment scores, current fall assessment measures. Thirty-one percent (31%) of falls were classified as IRF. Mean patient age was 78.1 years and median day of fall was Day 5 of hospitalization. Logistic regression of six fall risk factors found that inattention ($p=.00$, OR = 16.1) and mobility ($p=.00$, OR = 3.3) were significant predictors of IRF. Implications for assessment of IRF will be discussed within the NDB model.

SESSION 390 (PAPER)

GAIT - HS PAPER SESSION

ONE WALK A YEAR TO 1000 WITHIN A YEAR: THE VALUE OF CONTINUOUS IN-HOME UNOBTRUSIVE GAIT ASSESSMENT

J. Kaye, N. Mattek, D. Austin, S. Hagler, M. Pavel, T. Hayes, *Oregon Center for Aging & Technology, Oregon Health & Science University, Portland, Oregon*

BACKGROUND: Physical performance measures predict health and function in older populations. Walking speed in particular has consistently predicted morbidity and mortality. However, single brief walking measures may not reliably reflect a person's typical ability. Using a system that unobtrusively measures walking activity over time in a person's home we examined walking speed metrics over multiple time scales and their relation to function. METHODS: In 91 persons living independently (mean age 85, 86% women) we measured every instance of walking past a line of passive infra-red motion sensors placed strategically in their home for a mean of 319 ± 127 days. Daily, weekly and periodic (morning vs evening; seasonal) walking speeds and the vari-

ance in these measures were calculated and compared to conventional measures of gait, motor function and cognition. **RESULTS:** A total of 350,000 walks were recorded. Median number of walks per day was 13 ± 10 . Overall mean walking speed was 0.6 ± 0.3 m/sec. Fast walking (10th percentile of walks) was 1.0 m/sec. Men walked as frequently and fast as women. Slower walking speed correlated with increasing age. Within-subjects morning speeds were significantly faster and more variable than afternoons or evenings ($p < 0.0001$). In-home walking speeds were correlated with clinical gait measurements ($p = 0.001$). Subjects with executive function impairment ($n = 11$) had slower walking speed (0.54 m/s vs 0.62 m/s) and greater variability. **CONCLUSION:** Unobtrusive home walking assessments are ecologically valid measures of walking function. They provide previously unattainable metrics (periodicity measures, variability, range of minimum and maximum speeds) of everyday motor function.

IS VESTIBULAR DYSFUNCTION AN UNDERLYING FACTOR IN GAIT ABNORMALITY?

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Gait abnormality is an ill-defined condition with symptoms involving 2 or more diseases or body systems, according to International Classification of Diseases. It is commonly associated with neuromuscular and musculoskeletal pathology. Abnormal gait may increase falls risk and reduce mobility and quality of life. The purpose of retrospective study was to determine the percentage of patients with gait abnormality who also have vestibular dysfunction. The sample included 87 patients over 65 years of age with diagnosis of gait abnormality and was evaluated for vestibular dysfunction on the Balance Master™ (NeuroCom, Clackamas, OR). The age range was 66-93 years; mean 78.2 with 54 females and 33 males. The five most common co-morbidities were hypertension (57%), vision (37%), knee pathology (31%), lumbar pathology (29%), and hearing loss (24%). 80% of the entire sample had vestibular dysfunction. In each age group, 65-74; 75-84; and 85+ years, the females showed higher percentages having abnormal vestibular systems and the percentages in both genders increased as age progressed. Chi-square was significant at .05 level for vestibular dysfunction in 70% of males (23/33) and 85% of females (46/54). Only one of 23 persons (96%) over age 85 had normal vestibular function. Vestibular dysfunction increases with age, often is not assessed and appears to be an important underlying factor in gait abnormality. When evaluating persons over 65 years of age with an abnormal gait, not attributable to specific pathology like stroke or joint replacement, vestibular function should be tested. Compensatory interventions are possible.

THE ABILITY OF AGE, GENDER, AND ANTHROPOMETRIC MEASURES TO PREDICT SELF-SELECTED AND FAST WALKING SPEEDS IN HEALTHY COMMUNITY LIVING ADULTS AGED 72-98 YEARS

K. Chui, M. Lusardi, Sacred Heart University, Fairfield, Connecticut

Introduction: There is limited normative data for self-selected (SSWS) and fast (FWS) walking speeds for adults older than 70 years. Less is known about how age, gender and anthropometric characteristics correlate with and predict SSWS and FWS in this population. Understanding such relationships and ability of these variables to predict SSWS and FWS would assist health professionals in designing and assessing interventions. **Methods:** Participants were residents of a retirement community ($n = 118$, mean age 84.67 ± 5.3 years, 70.3% female) involved in a longitudinal study. Walking data were collected using the GAITRite, an instrumented walkway system. Descriptive statistics were calculated for independent variables: age, gender, and anthropometric measures (height, leg length, weight, body mass index [BMI]). Correlations were used to examine the relationships between independent and dependent

variables. Stepwise Multiple Regression was used to examine the ability of independent variables to predict dependent variables. **Results:** Significant ($p < .01$) correlations were found between SSWS and age ($r = -.49$), gender ($r = -.35$), height ($r = .32$), leg length ($r = .30$), and weight ($r = .29$). Regression analyses identified age and gender as the only significant predictors of SSWS ($r = .60$, $r^2 = .36$, $p < .000$). Similar significant ($p < .01$) correlations were found between FWS and age ($r = -.48$), gender ($r = -.38$), height ($r = .30$), leg length ($r = .28$), and weight ($r = .28$). Regression analyses identified age and gender as the only significant predictors of FWS ($r = .61$, $r^2 = .37$, $p < .000$). **Conclusions:** Age, gender, and anthropometric measures correlated with SSWS and FWS. Only age and gender predicted SSWS and FWS.

MAXIMAL GAIT SPEED VERSUS ALLOTTED CROSSING TIME AT SIGNALIZED INTERSECTIONS AMONG TWO COHORTS OF OLDER DRIVERS

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Background: As people transition from driving to other forms of transportation and walking, concern is raised about their safety as pedestrians. To explore this issue we utilized two large community-based cohorts of older drivers, comparing maximal gait speed of these healthy older persons to allotted crossing times at signalized intersections in New Haven, CT. **Methods:** The time allotted to cross intersections was obtained from the New Haven Traffic and Parking Department. Maximal gait speed was assessed by rapid pace walk: participants walked 10 feet up and back as fast as possible. **Results:** 1359 participants with mean age 78 years, 24% women, mean MMSE score 27.5, and 78% health excellent/good. Mean rapid pace walk time was 7.0 (2.1) seconds to cover 20 feet, the median was 6.6 seconds, and the range 3.7-29.4 seconds. These translated to maximal gait speeds of 3.0 ft/sec (mean), 3.0 ft/sec (median), range 0.7-5.4 ft/sec. Only 7% had maximal gait speeds sufficiently fast to cross typical signalized intersections where presumed gait speed is 4 ft/sec; 51% had maximal gait speeds sufficiently fast to cross intersections near high concentrations of older people with 3 ft/sec allotted. **Conclusion:** In earlier studies including frail older persons, <7% had usual walking speeds too slow to cross intersections in the allotted time. Even in the current group of healthy individuals, few had sufficient maximal gait speed to cross at typical intersections and only half at intersections with more older people. These findings suggest that intersection crossing times should be adjusted to better accommodate the gait speeds of even healthy older persons.

SESSION 395 (SYMPOSIUM)

MEDIA TAKES: REFRAMING THE NEW OLD AGE

Chair: D. Sheets, Health Sciences, CSU Northridge, Pine Mountain Club, California

Discussant: J. Hendricks, Oregon State University, Corvallis, Oregon

As media has become aware of the "graying" of the population, more attention has been given to aging and age-related issues. Images of aging have an important impact on society and on the way we see and treat older individuals. This symposium examines the content and social effects of media on mainstream cultural perceptions of aging. Presenters use critical analyses of traditional and contemporary media to examine how aging is conceptualized, framed and presented. A cultural anthropologist/journalist focuses on the production of print and broadcast news imagery to identify the influence of the baby boom generation in pushing the boundaries of "old age" as a social category. A cultural critic and playwright uses a framework of disability studies and performance theory to analyze how social networking and new media are depicting late life. A humanist/nurse applies a critical social/feminist perspective to examine aging in online media, including blogs and YouTube, assessing their potential to reframe old age.

THE LIFE COURSE AS A 21ST CENTURY NEWS STORY: CONTEMPORARY IMAGES OF AGING IN MEDIA

M. Vesperi, *Division of Social Sciences, New College of Florida, Sarasota, Florida*

Focusing on the production of print and broadcast news imagery rather than its consumption, this presentation is designed to help researchers identify the influence of the baby boom generation in pushing the boundaries of "old age" as a social category. Marketing experts predict that future discretionary spending will be controlled by older, healthier, more demanding consumers who are already sensitive to stereotypes and prepared to resist them. Yet advertisers continue to seek youth markets, an economically damaging trend for traditional news media which face steadily aging audiences and decreased attention to news among post-baby-boom generations. The aging of traditional media producers themselves and the downsizing of contemporary newsrooms are additional factors that affect how the topic of aging is conceptualized, framed and presented.

DOES "NEW MEDIA" CHANGE ANYTHING?

A. Basting, *University of Wisconsin Milwaukee, Milwaukee, Wisconsin*

Built on a foundation of her extensive research into cultural images of memory loss in her 2009 book *Forget Memory: Creating better lives for people with dementia*, Basting expands her reading of film and television images to include second life, twitter, Facebook, and short videos on Youtube to analyze how social networking and new media are depicting late life. Using a framework of disability studies and performance theory, Basting suggests that old stereotypes of aging persist, while some new media does offer a new way to look at aging that might usher us beyond our current youthful frame of reference.

VIRTUAL REALITY: REDEFINING THE IMAGE OF AGING

D. Sheets, *Health Sciences, CSU Northridge, Pine Mountain Club, California*

Despite an aging population, contemporary mass media such as journalism, entertainment and advertising, continues to reflect an obsession with youth. Ageist stereotypes in mass media influence the opportunities that older adults have to participate socially in society and the ways in which younger people imagine their future. New media online such as blogging, twittering and You-Tube can empower older adults to represent themselves realistically and thus alter attitudes and beliefs toward older people and old age. This presentation uses a critical social/feminist perspective to examine how older adults and aging issues are conceptualized, framed and presented in new media online. The analysis suggests that online media is powerful tool for transforming static perceptions of aging into a more dynamic and realistic representation that reflects the heterogeneity and diversity of older adults.

SESSION 400 (SYMPOSIUM)

ROLE OF MONOCYTES/MACROPHAGES IN AGE-RELATED IMMUNE DECLINE, ANEMIA, AND FRAILTY

Chair: S.X. Leng, *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*

Discussant: E.J. Kovacs, *Loyola University Medical Center, Maywood, Illinois*

The objective of this symposium is to describe recent development in characterization of the aging monocytes/macrophages and their activation biomarkers, focusing on their relationships with age-related decline in the innate and adaptive immunity, anemia, and the geriatric syndrome of frailty. After attending this session, participants will be able to define potential role of monocytes/macrophages and their activation in age-related immune decline, anemia, and frailty. This symposium will include 4 speakers who are experts in the field. Dr. Albert Shaw from Yale University will present his work on age-related decrease in monocytic and dendritic cell (DC) TLR function and its impact on

influenza vaccine response in older adults. Dr. Cindy Roy from Johns Hopkins University will report the association of elevated monocyte counts with decreased RBC counts and hemoglobin concentration in her mouse model of anemia of inflammation and aging. Dr. Neal Fedarko from Johns Hopkins University will present data on biomarkers of macrophage activation including serum neopterin levels and chitotriosidase activity, and their relationship with aging and frailty. Dr. Sean Leng from Johns Hopkins University will describe his work on monocytic expression of stress responsive inflammatory pathway genes in community-dwelling frail older adults. Dr. Elizabeth Kovacs from Loyola University is the discussant who will provide her insight into the latest development presented by the speakers as well as her perspective for future directions.

UPREGULATION OF STRESS RESPONSIVE INFLAMMATORY PATHWAY GENES BY PURIFIED MONOCYTES IN THE GERIATRIC SYNDROME OF FRAILTY

S.X. Leng, T. Qu, H. Yang, N. Fedarko, J. Walston, *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*

Frailty is an important geriatric syndrome that predicts morbidity and mortality. Substantial evidence suggests inflammation marked by elevated IL-6 levels as a key pathophysiologic factor that contributes to frailty. To explore its molecular mechanisms, we conducted pathway-specific gene array and quantitative RT-PCR analyses evaluating unstimulated and lipopolysaccharide (LPS)-induced expression of inflammatory pathway genes by purified CD14+ monocytes in 16 pairs of age, race, and sex-matched frail and non-frail older adults. The results showed significant upregulation in unstimulated monocytic expression of chemokine CXCL10 in frail older adults compared to non-frail controls and CXCL10 upregulation is highly correlated with frailty-associated elevation in IL-6 levels. Upon LPS stimulation, monocytic expression of 6 additional stress responsive inflammatory pathway genes was upregulated, compared to non-frail controls. These findings demonstrate upregulated monocytic gene expression in frailty and provide a basis for further investigations into monocytic activation and potentially dysregulated innate immunity in frail older adults

SERUM MARKERS OF MACROPHAGE ACTIVITY REFLECT AGE- AND FRAILTY-RELATED CHRONIC IMMUNE ACTIVATION

S.X. Leng, N. Fedarko, R. Ramanathan, A. Jain, M. Spencer, X. Tian, *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*

Immune activation is a sentinel maintenance/homeostatic mechanism. Macrophages, key components in immune activation, are involved in phagocytosis, destruction of microorganisms, and production of cytokines that regulate other cells involved in innate immune response. Chronically activated macrophages produce and release neopterin, a small GTP metabolite, and chitotriosidase, an enzyme, which can be measured in blood. Serum neopterin levels and chitotriosidase activity were positively associated with donor age in a study of 161 normal subjects. Neopterin levels also differ by gender and BMI. These biomarkers were employed to characterize the immune activation status in the geriatric syndrome of frailty. Both neopterin and chitotriosidase were significantly elevated in the frail group, after adjusting for gender and BMI. Chronic immune activation, through its cytokine production and tissue repair program alters the cellular microenvironment which can contribute to the altered cell phenotype and function underlying aging and age-related diseases.

AGE-ASSOCIATED ALTERATIONS IN TOLL-LIKE RECEPTOR FUNCTION IN HUMAN MONOCYTES AND DENDRITIC CELLS

A. Shaw, A. Panda, D. van Duin, F. Qian, S. Mohanty, H. Allore, R. Montgomery, *Yale University School of Medicine, New Haven, Connecticut*

Toll-like receptors (TLRs) recognize conserved elements in pathogens, and by activating antigen-presenting cells such as monocytes and dendritic cells (DCs) play a crucial role in the immune response to infection and vaccination. We determined age-associated changes in TLR function in human monocytes and DCs from young (21-30 years of age) and older (≥ 65) individuals receiving the influenza vaccine, using flow cytometry and intracellular cytokine staining. In monocytes ($n=159$), we observed an age-associated defect in TLR1/2-induced cytokine production, and a generalized defect in TLR-induced CD80 upregulation. In both myeloid and plasmacytoid DC populations ($n=104$), a more extensive defect in TLR-induced cytokine production was present (compared to monocytes), and a generalized defect in TLR-induced costimulatory molecule expression was also present. Our results provide evidence for immunosenescence of the TLR pathway in monocytes and dendritic cells; functional consequences of impaired TLR function for influenza vaccine response will be discussed.

NORMOCYTIC ANEMIA IN 18 MONTH C57BL/6 MICE IS ASSOCIATED WITH ACTIVATION OF INNATE IMMUNE RESPONSE

C. Roy, O. Prince, I. Prince, Q. Yu, C. Civan, J.D. Walston, *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*

Anemia is common in older adults and closely associated with morbidity and mortality. At least 1/3 of anemia in older adults is associated with chronic disease. To assess potential mechanisms driving anemia in the elderly, we investigated erythropoiesis in 18-month old (aged) C57BL/6 female mice. We found that aged mice had a normocytic anemia compared to 2-month old (young) C57BL/6 female mice ($p<0.001$). The anemia of aged mice resembled the anemia found in young mice with chronic sterile abscess ($p=0.001$) and was not explained by iron restriction. Aged mice also had increased circulating monocytes ($p<0.0001$), consistent with anemia driven by innate immune response. Flow cytometric analysis of bone marrow revealed a greater proportion of Ter119+CD71+ precursors are less mature in aged mice and mice with abscess. Together, these data support the hypothesis that mild inflammation in aged mice may inhibit the maturation of erythroid precursors, resulting in anemia.

SESSION 405 (PAPER)

AGING IN CHINA

ARE CHINESE OLDER PEOPLE LIVING ALONE AT RISK OF POOR HEALTH AND WELL-BEING?

D.S. Yu, *The Nethersole School of Nursing, The Chinese University of Hong Kong, Hong Kong, NA, China*

Background: Living alone in later life is regarded as a risk factor for deprived social support and poor health status. Yet, various demographic and social changes aggravate such living arrangement even in the Chinese society which emphasises family cohesiveness. Aim: This study aims at compare the socio-demographic characteristics and health status of the Chinese community-dwelling older people who were living alone and those who were not. Methods: This population-based survey interviewed 405 community-dwelling older people with the Short-Form 36 Health Survey, the Medical Outcomes Study Social Support Survey, and the Mental Health Inventory. Other socio-demographic and clinical data also collected. Result: Among the sample, 30.4% of them lived alone and the others either lived with spouse (31.1%) or lived intergenerationally (38.5%). By comparing older people of different liv-

ing arrangements, we found that older people who lived alone were characterized by more advanced age, more financial strain, shrunken social network and lower perceived social support. Although there was no difference in the number of stressful life events and chronic illnesses between the three groups, older people who lived alone reported higher psychological distress, poorer mental health, poorer physical function, less vitality, and more somatic symptoms including insomnia, joint pain and stiffness, dizziness, loss of appetite and activity intolerance. Living alone was an independent risk factor for poor HRQL. Conclusion: Living alone is associated with higher social and health care needs among Chinese older people. The findings have important implications on the planning of social and health services.

PROJECTING THE DEMOGRAPHIC AND POLICY IMPACTS ON ANNUAL PENSION DEFICITS: A SIMPLE METHOD AND ILLUSTRATIVE APPLICATION TO CHINA

Y. Zeng, *Center for Study of Aging and Human Development, Duke University, Durham, North Carolina*

Objectives: Policymakers, scholars and public are very concerned about possible annual pension deficit in future years induced by unavoidable population aging. This issue will be addressed in present study by methodological development and illustratively application to China. Method: I propose a simple method for projecting the annual pension deficit rate which is defined as percent of the total wages based on a few demographic and pension program policy parameters. The method can also be used to estimate the adjusted replacement rate and contribution rate necessary to achieve zero annual pension deficit, while assuming equal or differential changes in relative incomes of the workers and retirees. Results: The illustrative application to China demonstrates that if the average age at retirement gradually increases from the current very low level to the international standard in 2040, the annual pension deficit would be much smaller than that under the constant retirement age. With everything else being equal, the annual pension deficit in the two scenarios of medium fertility (smooth transition to two-child policy) and low fertility (current fertility policy unchanged) will not differ significantly before 2030, but the differences will become increasingly larger after 2030. The impact of possible mortality changes is likely moderate. Conclusion: A gradual increase in the average age at retirement plus medium fertility associated with a smooth transition to the two-child policy and viable reforms in pension system management may help China to avoid the big troubles of annual pension deficit.

FAMILY COMPOSITIONS AND MULTIPLE PARENT-ADULT CHILD RELATIONSHIPS AMONG CHINESE RURAL ELDERS

M. Guo, I. Chi, M. Silverstein, *School of Social Work, University of Southern California, Los Angeles, California*

Most existing studies on intergenerational relations have relied almost exclusively on single parent-child dyads. Little research has investigated the patterns of multiple parent-adult child relationships and determinants of within-family differences in parent-child relations. This study explores the relationships between family compositions and multiple parent-child relations among older adults in rural China. The sample for this investigation consisted of 1,529 Chinese aged 60 and above with at least two adult children in rural Anhui province, China, in 2001. Multiple parent-child relations were assessed by three collective measures of parent-child relations in a family: the highest, lowest and range in older adults' reported quality of relations across all children. Family compositions were measured by number of sons and daughters in a family, average distance between the houses of parents and all children, and the geographic dispersion among family members. The results of OLS regressions showed that having more sons and daughters is associated with positive (highest quality) but not negative (lowest quality) parent-child relations for both mothers and fathers. Having more sons and daughters also increases mothers' differentiations in relations across

all children (range). Only the number of sons affects fathers' differentiation in parent-child relations within families. An average greater household distance between parents and children enhances the positive parent-child relations among mothers. Geographic dispersion of family members is associated with negative parent-child relations among parents of both genders. The results of this study yield a more complete view of family dynamics in later life than the single parent-child dyad explanations.

ECONOMIC DEVELOPMENT AND HOUSEHOLD ECONOMIC WELL-BEING OF OLDER PEOPLE IN URBAN CHINA

T.Y. Lum¹, Y. Xu², X. Zhang², 1. *University of Minnesota, St. Paul, Minnesota*, 2. *Beijing Normal University, Beijing, Beijing, China*

Objective: China has achieved a spectacular success in its economic development since it started to reform its centrally-planned economy in 1978. However, economic reform also led to a wide array of social problems, including widening gaps between the rich and poor, unemployment, and wide-spread urban poverty. Elderly people are particularly vulnerable to these negative impacts of social and economic developments. The objective of this study was to understand how economic development in China affected the economic well-being of urban elderly residents. **Methods:** Data for this study came from the 2004 China Urban Household Survey. 2,823 survey participants were selected from eight large urban cities using stratified sampling method. 1,335 participants were 65 years or older. Data collection was done by trained interviewers through face to face interviews. Outcome measures included household income, economic hardship index, household economic buffering capacity, subjective economic satisfaction and Gini coefficient for income inequality across cities. Multivariate analyses, including OLS regression and ordered logit regression, were used. **Findings:** Household income was directly associated with levels of economic development. Highly developed cities, like Beijing and Guangzhou, had significantly higher household income than other cities. However, differences in household income did not translate into differences in economic hardship experience. Residents in cities with significantly lower household income reported neither more hardship experience nor lower subjective economic well-being. Our analysis of Gini coefficient showed that inequality was more severe in middle range cities than in well-developed cities, indicating that high economic development does not necessarily lead to high inequality.

SESSION 410 (SYMPOSIUM)

AN OBAMA EFFECT? EXAMINING CHANGES IN PARTICIPATION, ENGAGEMENT, AND POLITICS

Chair: *F.L. Cook, Institute for Policy Research, Northwestern University, Evanston, Illinois*

Discussant: *R. Hudson, Boston University, Boston, Massachusetts*

Political commentators report that there has been an "Obama effect" in terms of political participation and politics but rarely try to differentiate whether this impact (to the extent it actually exists) differs by age group. This symposium examines the extent to which the Presidential campaign and election of Barack Obama affected voting patterns and political participation among older Americans in comparison to younger age groups and the extent to which the politics of aging has been altered. Regarding voting, older Americans were the only age group to vote for John McCain. Robert Binstock uses 2008 exit poll data to examine three factors that shaped that outcome: cohort effects, identification, and a "Bradley effect." Regarding political participation beyond voting, Fay Lomax Cook and Meredith Czapslewski use NES election year data since 1992 to examine the extent to which 2008 was different for Americans by age in terms of levels of campaign work, donating money, influencing others, and discussing politics. Although they find a rather complicated pattern of participation by age group across all these domains, one

finding is clear: all age groups age 30 and over were more interested in the 2008 election than in the elections from 1992 to 2004. Finally, Polivka steps back with a broad perspective to ask whether a new politics of aging will emerge. He concludes that emerging threats to retirement security, continuing neo-liberal attacks on entitlement programs, and large projected budget deficits will shape the politics of aging in new ways for decades to come.

OBAMA AND THE NEW POLITICS OF AGING

L. Polivka, *Florida Policy Exchange Center on Aging, Tampa, Florida*

The Obama administration's proposed budget for 2001 represents an ambitious and broadly progressive policy agenda and a qualitative departure from the neoliberal priorities of the Reagan/Bush era. This agenda, however, does not explicitly address a range of emerging threats to the retirement security of the next generation of retirees, the baby boomers. Simultaneous with these developments, the decades-long neoliberal attack on the entitlement programs (Social Security and Medicare) is likely to be renewed in response to the huge budget deficits projected over the next ten years. These conflicting forces will shape the politics of aging for decades to come. The presentation will conclude with an analysis of the options available to the Obama Administration in addressing these conflicts in the new political economy of aging.

THE 2008 PRESIDENTIAL ELECTION: OBAMA, MCCAIN, AND COHORT EFFECTS

R. Binstock, *Case Western Reserve University, Cleveland, Ohio*

In the 2008 presidential election, older voters were the only age group to vote for John McCain. Overall, Barack Obama won by a margin of 53 percent to 46 percent. Yet, persons aged 60 and older gave 51 percent of their votes to McCain and 47 percent to Obama. Among voters aged 65 and older, McCain was favored even more; he received 53 percent of their votes compared with Obama's 45 percent. This presentation draws on exit polls to examine why older voters favored McCain. One factor was that an "Eisenhower cohort" of Republicans had joined the ranks of older voters. A second factor appears to have been positive identification with McCain's age by voters aged 65-74. A third factor was a "Bradley effect," or in this case an Obama effect: White voters aged 65 and older joined White voters aged 30-44 in voting heavily for McCain.

AN OBAMA EFFECT? OLDER AMERICANS AND CHANGES IN POLITICAL PARTICIPATION ACROSS AGE GROUPS, 1992-2008

F.L. Cook, M. Czapslewski, *Institute for Policy Research, Northwestern University, Evanston, Illinois*

Political commentators report that there has been an "Obama effect" in terms of political participation and political interest but rarely try to differentiate whether this impact (to the extent that it actually exists) differs by age group. This paper uses the NES election year data from 1992 to 2008 to go beyond examining voting as a measure of political participation to investigate how other forms of political participation (e.g., persuading others, donating money, attending political events, and displaying candidate support) and political interest (political discussion, campaign interest, and media and Internet usage) changed in 2008 compared to earlier elections. Traditionally, older Americans have participated in different ways than younger Americans. However, the election of 2008 saw more older Americans embrace new participatory behaviors that have traditionally been utilized by younger generations, narrowing the gap by which we differentiate the political participation of the old and young.

CAREGIVING: INFORMAL AND FORMAL

NEIGHBORHOOD CONTEXTS IN SERVICE UTILIZATION AND PERCEIVED BURDEN FOR CAREGIVERS OF PERSONS WITH ALZHEIMER'S DISEASE: AN ANALYSIS OF ADULT PROTECTIVE SERVICE CASE FILES

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Research on caregiving in Alzheimer's Disease (AD) has rarely considered the community context. Using a conceptual framework that integrated service utilization, burden, and elder maltreatment literatures, four hypotheses were tested in this study: 1) Caregivers in more disadvantaged neighborhoods would use fewer formal services 2) Caregivers in more disadvantaged neighborhoods would experience higher caregiver burden, 3) Caregiver burden would be more strongly related to caregiver burden than individual characteristics of care provider and recipient, and 4) The relationship between burden and abuse is mediated and potentially moderated by neighborhood dynamics. This study analyzed data from 751 Adult Protective Service (APS) case files from three cities within a Mid Atlantic state. To measure neighborhood characteristics, several variables were extracted including percent of population living within poverty, unemployment, population turnover, percentage of vacant homes. Additional characteristics included sociodemographics of care recipient and care provider, diagnosis of AD, and type of residential setting. Results indicate that there is partial support for the hypotheses. APS case reports indicated higher level of both burden and abuse in more disadvantaged neighborhoods regardless of individual level factors. However, the type of abuse did not differ across the various locations. Rates of service utilization were significantly different, with lower rates found in disadvantaged neighborhoods. These results recast ways to initiate elder maltreatment services. The typical model focuses on the characteristics of caregiver and provider such as relationship status and functional abilities. These findings suggest that community level variables are crucial and are relevant for decreasing elder maltreatment rates.

THE QUANTITY OF ACTIVE HELP AND SUPERVISION PROVIDED TO OLDER ADULTS WITH NEUROPSYCHIATRIC SYMPTOMS: THE AGING, DEMOGRAPHICS, AND MEMORY STUDY (ADAMS)

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(Background) We estimated the quantity of active help and supervision provided to older adults with neuropsychiatric symptoms in a nationally representative sample in the U.S. (Methods) We used data from the ADAMS, a sub-study of the Health and Retirement Study focused on cognitive impairment. We obtained the presence of neuropsychiatric symptoms (delusions, hallucinations, agitation, depression, apathy, elation, anxiety, disinhibition, irritation, and aberrant motor behaviors) using the Neuropsychiatric Inventory. The hours per week of active help with ADL/IADL limitations, and supervision to ensure safety were ascertained by informant questionnaire. (Results) After adjusting for sociodemographics, use of paid help, cognitive function, and chronic medical conditions, those with no neuropsychiatric symptoms received an average of 5.1 hours of active help and 4.6 hours of supervision per week from informal caregivers. Those with 1 or 2 neuropsychiatric symptoms received an additional 2.2 hours of active help and 3.0 hours of supervision per week ($p < .001$), while those with 3 or more symptoms received an additional 6.2 hours of active help and 11.2

hours of supervision per week ($p < .001$). Among those with cognitive impairment without dementia (CIND) and dementia, the presence of disinhibition (16.8 additional hours) and irritation (15.8 additional hours) were associated with greatest number of additional hours of supervision. (Conclusions) Neuropsychiatric symptoms among those with CIND and dementia are associated with a significant increase in the provision of informal care, especially supervisory care. This care represents a significant time commitment for families and a significant economic cost to society.

FORMAL AND INFORMAL CARE USE AMONG COMMUNITY DWELLING OLDER PEOPLE: COMPARING THOSE WHO DIED AND SURVIVED

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Objective: To investigate the patterns of formal paid and informal unpaid care use among two groups of community-dwelling older people- decedents and survivors- over a two-year period. Methods: We used data from the 2002 Health and Retirement Study (HRS); N= 19,668 persons aged 50 and older. The quantity of caregiving is the number of hours per week. Separate multivariate logistic regressions were performed to examine the probability of informal and formal care use among two groups. Among decedents and survivors with any helpers, ordinary linear regression models were performed to examine factors associated with greater hours of formal and informal care. Results: Controlling for age, physical and cognitive disability and other factors, the probability of receiving formal and informal care was higher for decedents than for survivors. The amount of care provided was also significantly higher for decedents than survivors. Effect of number of Instrumental Activity of Daily Living (IADL) for survivors on probability of informal care use and receiving greater hours was higher than for decedents while effect of number of ADL on probability of use of formal care and receiving greater hours was higher for decedents than survivors. Conclusion: Prior to death, there is an increased demand for assistance from both family members and paid caregivers. Even after adjusting for physical and cognitive disability, vital status is associated with greater likelihood of receiving care and greater hours of care. This suggests that taking care of dying older people places additional burdens beyond what can be explained on the basis of health status alone.

WHOSE CHOICE? THE MOTIVATIONS AND WELL-BEING OF CONSUMER-DIRECTED FAMILY AND FRIEND CAREGIVERS

K.G. Kietzman¹, A. Benjamin², R.E. Matthias², 1. *Health and Aging Policy Fellow, Atlantic Philanthropies, Washington, District of Columbia*, 2. *University of California, Los Angeles, Los Angeles, California*

Given the growing demand for long-term care services and a well documented direct care workforce shortage, it is important to understand what attracts people to engage in personal care work. This study examines the motivations and well-being of family members and friends paid to provide in-home personal care services to Medicaid-eligible disabled and elderly. Drawing from tenets of Self-Determination Theory, we also investigate whether caregivers perceive they have a choice in assuming the paid role and how much importance they attribute to being paid. Hierarchical regression analyses of survey data collected from 383 "related" caregivers hired directly by consumers through California's In-Home Supportive Services program indicate that those who report less choice experience more caregiver-related stress (.210, $p < .001$), less job fit (.124, $p < .05$), and less overall caregiver well-being (.149, $p < .01$). Caregivers stating they would definitely not provide care without pay are less likely to feel rewarded by (.285, $p < .001$) or attribute value to (.194, $p < .001$) the caregiving experience. While recent studies of consumer-directed home care offer evidence of positive outcomes

for both caregivers and care recipients, we must be careful not to assume that family members and friends are always the most appropriate candidates for these roles. Social workers and other health care professionals working with caregiving families may be well advised to consider how perceived choice and importance of payment may affect efforts to find a caregiving arrangement that serves the best interests of both caregiver and care recipient.

SESSION 420 (PAPER)

NURSING HOME ORGANIZATION AND PERFORMANCE

QUALITY OF CARE: IMPACT OF ORGANIZATIONAL CHARACTERISTICS ON NURSING HOME DEFICIENCIES

H. Lee, M.A. Blegen, C. Harrington, *UCSF School of Nursing, San Francisco, California*

Poor quality of care in nursing homes has been a persistent problem in the United States for over 40 years. In 2000, 23.5 percent of facilities received at least one deficiency rating serious enough to cause harm or immediate jeopardy to residents. Despite government oversight within this sector, there are significant variations in quality of nursing home care within states. The main purpose of this study was to better understand the impact of nursing home characteristics on quality of care. This paper focused on the third aim of the main study, which examined multidimensional associations between organizational characteristics, nurse staffing levels, and nursing home deficiencies, controlling for resources, resident, and market characteristics. This study used secondary data from Online Survey Certification and Reporting (OSCAR) data, Minimum Data Set (MDS) 2.0, quarterly staffing data from the state inspections, and Area Resource File (ARF). The population of 195 nursing homes out of 199 Colorado freestanding homes in 2000 was analyzed. Negative binomial regression models were used for data analysis. There was a significant effect of for-profit status only on quality-of-life citations. Nursing homes affiliated with chains had more total, substandard-care, and quality-of-care citations. Considering different staffing decisions, regulatory systems need to be designed carefully and systematically to improve quality of care. To improve overall quality of care within a state, nurse staffing levels as a target need to be increased by instituting higher state staffing standards and health policies that enable nursing homes to increase nurse staffing levels.

HUMAN AND ORGANIZATIONAL CHARACTERISTICS OF HIGH AND LOW PERFORMING NURSING HOMES: A COMPARATIVE STUDY USING MIXED METHODS

D. McMaughan Moudouni, B. Kash, *PHPM, TAMHSC SRPH, College Station, Texas*

Research Objective: To identify, from the perspective of long-term care consumers, adaptive and maladaptive nursing home care practices related to human and organizational characteristics in high and low performing nursing homes. Study Design: A mixed method study design was utilized. Quantitative data of performance measures related to people, processes, quality, service, and finance were retrieved from secondary data sources to create selection criteria identifying high and low performing nursing homes in a Southwestern state. Qualitative data on six high and low performing facilities collected through focus groups with 45 long term care consumers were analyzed based on an inductive methodology. Principal Findings: High and low performing facilities differed in residents' and families' perspectives of human and organizational factors. Prominent themes related to staffing, management practices, and physical environment emerged from the comparative focus group analysis. Participants from low performing homes expressed fear and concerns for safety, lack of attention by staff to basic needs, and chronic low staffing levels. Participants from high performing homes expressed comfort with their surroundings and fulfillment of basic and

higher needs by staff. Conclusions: Long-term care consumers can provide valuable insight into work and organizational practices affecting perceived quality of nursing home care. These insights point to differences between high and low performing facilities amenable to change, rather than traditional classifications of homes not easily changed (such as profit status or geographic location). Recommendations for nursing home management and long term care policy makers include efforts to improve communication between staff and consumers, attention to food preferences, attention to interior facility aesthetics as experienced by residents and development of a sense of ownership in the facility.

TRENDS IN NURSING HOME OWNERSHIP AND CORPORATE STRUCTURE

D.G. Stevenson, D. Grabowski, *Health Care Policy, Harvard Medical School, Boston, Massachusetts*

Policymakers recently have focused attention on issues of corporate oversight and accountability in the nursing home sector. A key lynchpin in researching and enforcing policy directives around nursing home ownership is having timely, detailed data about ownership structures and management arrangements, something current federal datasets are not able to facilitate. Through its Ownership, Management, and Tracking (OMT) System, the State of Texas has collected detailed information on nursing home ownership structures and management arrangements since 2000. Using these data, we found various elements of corporate restructuring between 2000-2007, a trend likely driven in part by the state's liability climate. We found that the use of limited liability company (LLC) and limited partnership (LP) structures increased considerably over the study period, from 12-23% of facilities for LLCs and from 13-33% of facilities for LPs. The use of management companies by Texas nursing homes also increased considerably between 2000-2007, growing from 6-36% of all facilities. Importantly, nearly half of these management companies were corporate entities that had the same owner as the nursing home itself. Finally, we observed an overall increased complexity of nursing home ownership structures in the state, with the percent of final owners at least 5 layers deep increasing from 0.6-11% between 2000-2007, and the percent of final owners at 1-2 levels deep decreasing from 90-70% over the same time period. In addition to describing these changes, we will assess the potential implications of these changes for quality of care and discuss their ramifications for public policy.

SESSION 425 (PAPER)

PROMOTING GERONTOLOGY TRAINING AND RESEARCH

PROMOTING MULTI- AND INTERDISCIPLINARY AGEING RESEARCH IN THE UNITED KINGDOM

C. Hennessy¹, A. Walker², *1. School of Nursing and Community Studies, University of Plymouth, Plymouth, United Kingdom, 2. University of Sheffield, Sheffield, United Kingdom*

Despite the growing awareness of the value of discipline spanning research on ageing, many common but significant barriers to interdisciplinary collaboration persist. In view of these barriers, government and other scientific funding bodies worldwide are actively involved in establishing the methods and means to promote cross-disciplinary cooperation in the field. In the United Kingdom, since the late 1990s, national Research Councils with key interests in ageing and older people have been actively pursuing the development of programmes of research which feature multi- and interdisciplinarity. This presentation reviews key developments in the promotion of multidisciplinary science on ageing in the United Kingdom including Research Council programmes and other strategic initiatives. It details the approach to multi- and interdisciplinary research developed by the authors in the National Collaboration on Ageing Research, a partnership among four of the Research

Councils to stimulate cross-disciplinary collaboration through working with scientists, funding bodies, and research end users. The presentation highlights how this approach is being pursued in the New Dynamics of Ageing (NDA) Programme (2005-2012), the largest programme of multidisciplinary ageing research to date (£20 million) in the United Kingdom which spans the social, medical, biological, and engineering sciences, and the arts and humanities. Examples of how cross-disciplinary working is being stimulated in the NDA are provided including the incubation of interdisciplinary research teams under the programme's Preparatory Networks scheme.

CHANGING MEDICAL STUDENTS' ATTITUDES TOWARD OLDER ADULTS AND CAREER PLANS: OUTCOMES OF VITAL VISIONARIES PROGRAM

E. Gonzales¹, N. Morrow-Howell¹, P. Gilbert², 1. George Warren Brown School of Social Work, Washington University in St. Louis, St. Louis, Missouri, 2. The OASIS Institute, St. Louis, Missouri

PURPOSE: To examine if partnering healthy older adults with first/second year medical students in an art program can counter negative stereotypes, enhance their attitude toward older adults, and influence their likelihood of becoming geriatricians. **DESIGN AND METHODS:** Two hundred and eight (208) medical students (112 treatment; 96 comparison group) and 120 older adults participated in a national pilot project, Vital Visionaries, funded by NIA, and sponsored by OASIS in six of the eight cities from 2007-08. Participants typically met for two hours on a Saturday for four sessions at a local art museum to discuss and/or create art in small groups or pairs. Pre-post surveys captured attitudes towards older adults and career plans. Changes in attitudes across groups and time were analyzed using Generalized Estimating Equation; effect sizes were calculated using Hedge's G. Reflection homework, focus groups and telephone interviews (program directors) served as qualitative data. **RESULTS:** Attitudes towards old adults were positive for both groups at pre-test; however the treatment group became even more positive in their attitudes toward older adults at post-test ($p < .001$) with a moderate-high effect size, .58. Treatment group felt they had more in common with older adults at post-test ($p < .001$), with a moderate-high effect size, .62. The program did not influence their career plans ($p = .43$). However, students spoke of their limited exposure to non-familial, healthy older adults. Some reported that they gained personal understanding/professional skills to interact with older adults; they saw the individual rather than their age; and the program reduced their levels of fear in interacting with older adults.

WHAT DOES IT MEAN TO BE A GERONTOLOGIST?: REFLECTIONS FROM FACULTY AND STUDENTS IN GERONTOLOGY DOCTORAL PROGRAMS

H. Ewen, D.C. Carr, P.P. Brown, S. Kunkel, *Sociology and Gerontology, Miami University, Oxford, Ohio*

Until recently, "gerontologists" have been trained in traditional disciplines. Over the last two decades, a growing numbers of scholars have begun to enter the field with doctoral degrees in gerontology. The introduction of a new variety of "gerontologists" to the field suggests that the goals of the field itself are changing and expectations of gerontologist's contributions are being redefined. At a time when aging research is gaining broader attention and the need for research is increasing, it seems timely for the field of gerontology to examine these issues. This study reports results from the 2009 wave of the Gerontology Education Longitudinal Study (GELS) survey, using responses from third year gerontology doctoral students and faculty in gerontology doctoral programs in the United States. Specifically, this presentation examines faculty and student responses to the following question: "Briefly describe, in your own words, what it means to be a gerontologist." Students and faculty describe the knowledge gerontologists should have, the way knowledge is applied, and the ways in which knowledge should be used. Through the description of these three aspects of gerontological knowl-

edge, two dominant types of definitions of gerontologists emerge segmented along social and biological domains. We will discuss these two types of gerontologists and implications for how these perspectives may be useful in identifying common goals for the field of gerontology and examining the implications for how gerontology doctoral programs are preparing scholars to become "gerontologists."

AGING-COMPETENCE AND EXCELLENCE: LEARNING FROM SOCIAL WORK TO PREPARE THE HEALTHCARE WORKFORCE

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The number of Americans aged 65 and older will almost double and grow to comprise nearly 20% of the U.S. population by 2030. This shift in the age distribution places accelerating demands upon a health-care workforce already too small and critically unprepared to meet their health needs, (IOM, 2008). The Institute of Medicine's (IOM) 2008 report, Retooling for an Aging America: Building a Health Care Workforce, calls for immediate investments in preparing our healthcare system to provide the services needed by older Americans and their families. These are the IOM's recommendations for action – ensure an aging-competent workforce, recruit specialists to the workforce, and redesign systems and models of care. Pioneering educational initiatives is one solution to address IOM's recommendations and help health-care professions meet the demands of the rapidly aging population and anticipated workforce needs. An example of such an initiative is the Hartford Partnership Program for Aging Education (HPPAE) which is funded by the John A. Hartford Foundation and administered by The New York Academy of Medicine. This model has successfully trained aging-competent social workers by providing students with practical experiences working with older people through exposure to a range of community services across the continuum of care. An innovative model such as the HPPAE provides strategies that other healthcare professions can learn from and adapt into their education programs. This presentation will give a brief overview of the model and then discuss the opportunities and challenges that such a model presents for other professional training programs.

SESSION 430 (POSTER)

RESIDENTIAL CARE

AGEING AND HEALTH RELATED CHANGES OF PEOPLE WITH INTELLECTUAL DISABILITY LIVING IN GROUP HOMES IN AUSTRALIA

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As people with intellectual disability live longer, they are beginning to experience the health changes associated with general ageing. Group homes for people with intellectual disability are based on social models, emphasizing inclusion, engagement in community and quality of life. As age related changes occur, group home staff are challenged to support people experiencing health problems to remain in the group homes. This longitudinal study was conducted in Victoria, Australia to explore how group home staff respond to age related health conditions of residents and to identify factors that put people at risk of premature relocation. Consistent with the exploratory purpose of the study and the general lack of data on the topic, we chose a theory generating methodology, Grounded Theory, to conduct the study. In depth interviews were conducted with 18 family, staff, resident clusters, at three points in time, at 6 month intervals. A total of XX interviews have been completed. In keeping with the theory-generating approach, early interviews were open and exploratory, evolving over time to facilitate comparative analysis across groups, strategies, conditions and care issues. Findings: Con-

cerns over the challenges created for the affected resident, staff and other residents were common. Issues included: inability of residents to retire despite age and health status, significant negative hospital experiences, premature moves to nursing homes, disruption to general house activities and routines of other residents, altered work routines, inadequate staffing, lack of awareness about local services, philosophies of care that could not accommodate ageing in place.

FACTOR ANALYSIS OF END-OF-LIFE CARE BEHAVIORS EXECUTED BY NURSES AND CARE-WORKERS WORKING IN NURSING HOMES

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The number of residents who died in nursing homes doubled from 1995 to 2007 in Japan. Quality assurance for end-of-life care is one of the main issues for professionals working with the frail elderly living in nursing homes. Both nurses and care-workers are mainly responsible for care in nursing homes, but the division of support executed by the two kinds of professionals as end-of-life care is not clear. A survey was conducted, and 255 care-workers and 85 nurses working in 41 nursing homes in Osaka prefecture cooperated. The results of factor analysis indicated that both kinds of professionals executed activities connected to 4 factors among supporting behaviors: (1) medical care; (2) support for the residents regarding self determination and providing information to their families; (3) personal care; (4) care for the families who are confronting the death and dying of a resident. More nurses reported carrying out factors of care (1) ($t=25.84$, $p<.001$) and (4) ($t=8.12$, $p<.001$), and more care-workers reported carrying out factor of care (3) ($t=11.62$, $p<.001$). Execution of factor of care (2) was not differentiated (ns) between the two kinds of professionals. Detailed analysis of factor (2) indicates that more care-workers try to assess residents' will than nurses. Nurses think they are responsible for both medical and psychosocial end-of-life care, but they do not think they are executing psychosocial end-of-life care. Comments from the respondents were also analyzed and care-workers expressed their need to be able to support residents regarding psychosocial needs.

TAILORING SENSOR TECHNOLOGY TO MEMORY IMPAIRED RESIDENTS IN INDEPENDENT LIVING RESIDENCES

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Older adults and their family members are rapidly embracing Independent Living Residences (ILRs). ILRs are less expensive than traditional assisted living residences because few professional and supportive services are offered since residents are "independent". Evidence is accruing that some elders appear appropriate during application interviews but upon relocation and/or over time exhibit confusion. Mentally impaired residents raises individual and collective safety concerns. Can home monitoring technology help? Based on input from eight focus groups ($n=26$) in ILRs, we developed and tested a passive sensor based unobtrusive apartment monitoring system. It uniquely tailored the type of sensor and activities monitored to the residents'/family/ staff particular concern(s) and for the first time securely triaged sensor alert information to multiple parties. For the intervention there were 10 residents, 10 family caregivers, 8 building staff, and 4 consulting nurse practitioner participants across 2 ILRs. Findings revealed that all participants expressed concerns about resident safety and well-being. Specific issues varied and included movement/falls, medications, meals, and bathroom water overflows. Family members "worry" rate dropped significantly from 50% to 20% post intervention. Staff (60%) rated the system as very much addressing their concerns and (80%) would highly recommend. Most residents underestimated their personal vulnerability. Key to acceptance was the residents' perceived need and usefulness of the system to

maintain independence and prevent being relocated to a more restrictive environment. Users favored passive alert notices, (over proactively monitoring the website for residents' status) that were few in number, and valid. Recommendations for developers and ILR staff are outlined.

SAME-SEX COUPLES IN LONG-TERM CARE: CONCERNS AND PERCEPTIONS REGARDING FUTURE CARE

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Studies have documented homophobia and heterosexism in health care services, yet little is known about how older gay men or lesbians experience the long-term care system. Our qualitative study explored the concerns that aging same-sex couples have in terms of accessing home care services and entering long-term care facilities. Data were gathered from 12 same-sex couples. In-depth, active interviews were conducted with 18 older lesbians and 6 older gay men. Data were analyzed using a grounded theory approach. Findings were organized around 4 major categories: (1) Stigmatization. Participants were concerned about the discriminatory attitudes of formal caregivers and how their ability to advocate for themselves might diminish as their health deteriorated; (2) Identity. Participants wanted formal caregivers to appreciate their personhood as encompassing more than their sexual identity. Participants also wanted recognition that they were partners in a coupled relationship, and were similar to any other married person; (3) Expenditure of Energy. Participants felt that their involvement with the long-term care system would require them to expend energy that a heterosexual would not have to do. They referred, for example, to "hiding" their identity, "assessing" for discrimination, and "educating" others; (4) Nuanced Care. Participants wanted caregivers to form a meaningful connection with them that reflected a deepened acceptance and which went beyond being "a fake liberal." Policy implications at the institutional level include the need to properly screen staff and provide them with sensitivity training, incorporate inclusive language in organizational policies, and offer social programs that reflect gay/lesbian cultures.

A PDA-BASED MEASUREMENT OF PRESSURE ULCER PREVENTION BY NURSING ASSISTANTS IN 2 VA-AFFILIATED COMMUNITY NURSING HOMES

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Objectives: (1) To determine percentages of observed certified nursing assistant (CNA) care processes associated with pressure ulcer prevention (PUP) using a PDA-based measure and (2) to determine percentages of direct, indirect, and unproductive processes observed. Method: A descriptive observational study using work-sampling, 2 VA-affiliated community nursing homes (174-bed and 158-bed), and a convenience sample were used, including 4 and 9 CNAs, respectively. The unit of analysis was each care process, out of 93 possible. Final samples included 783 and 577 observations at each site, totaling 1,360 care processes observed. The sample size exceeded that required for a 95% confidence level ($p < .05$). Reliability testing of 10% of total observations by 2 data collectors resulted in reliability scores of at least 90% reliability of occurrence and non occurrence of observed processes. Descriptive statistics were used. Findings: Facility characteristics were similar: ownership, size, average census, case mix index, average hourly wages, and nurse staffing levels. Staff at site 1 was older; more experienced, and had longer tenure. Most were female, ethnically diverse, and worked day shift. Categories of care observed included direct (88% vs. 93%); indirect (5% vs. 4%); unproductive (7% vs. 4%). Percentages of clinical domains associated with PUP included general work (65% vs. 66%); incontinence (2% vs. 5%); nutrition (22% vs. 16%); pain .5% vs. 0%); and pressure ulcer/mobility (11% vs. 13%). Conclusions: Using a PDA to observe CNA care processes associated with PUP is feasible. Generic processes (general work) were frequently observed. Few care processes addressed pain management.

THE NURSING HOME DINING ASSISTANT PROGRAM: A DEMONSTRATION PROJECT

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The intent of this project was to replicate and extend a previous Centers for Medicare and Medicaid Services and Agency for Healthcare Research and Quality funded Dining Assistant (DA) evaluation study through the implementation and evaluation of a new DA program in two nursing homes (NH) that were selected using convenience sampling. Indigenous non-nursing staff received a minimum of eight hours of DA training following the federal and state requirements. Subsequent to training and skills assessments, DAs provided assistance to qualified residents during at least one scheduled meal per week. Standardized protocols were used by research staff to conduct observations during all three meals at baseline and 6-months post-implementation. Additional observations were conducted throughout the program targeting meals where DAs were providing assistance. Twelve-month post-implementation observations were conducted to assess program sustainability. Face-to-face interviews were conducted with staff post-implementation. Results replicated previous findings that DAs spend more time assisting residents, and that the quality of feeding assistance provided by DAs is comparable to, or better than, that provided by their nurse aide counterparts. Staff interviews also replicated previous findings with the majority of indigenous staff at all levels reporting positive benefits of the DA program for both staff and residents. Further, findings revealed a significant increase in social stimulation from baseline to 6-months and confirmed the continuation of the DA program at 12-month follow-up. DA programs that augment existing staffing levels offer a feasible way to improve nutritional care for residents within the constraints of existing staffing resources.

MINNESOTA'S NURSING HOME PERFORMANCE-BASED INCENTIVE PAYMENT PROGRAM: AN INNOVATIVE MODEL TO PROMOTE CARE QUALITY

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Minnesota's Nursing Home Performance-Based Incentive Payment Program (PIPP) supports provider-initiated projects aimed at improving the quality and efficiency of nursing home care. PIPP takes a broader approach than a conventional pay-for-performance program. It seeks to promote implementation of evidence-based practices, encourage innovation and risk taking, foster collaboration and shared learning, and establish a solid case for investing in better quality from the perspective of the state, nursing homes, and consumers. Provider-initiated projects lasting from 1-3 years are selected through a competitive application process and are funded for up to 5% of the daily per diem Medicaid rate. Providers are at risk of losing up to 20% of their project funding if they fail to achieve measurable outcomes which are tied to state nursing home performance measures, i.e., nursing home quality indicators and results of Minnesota's annual resident quality of life survey. Minnesota has made a major investment in PIPP by supporting 45 individual or collaborative projects, representing approximately 160 facilities and total funding of over \$23 million. Projects involve a wide range of interventions, such as fall reduction, wound prevention, exercise, improved continence, pain management, resident-centered care and culture change, and transitions from nursing home to community. We explain the PIPP program rationale and design, describe projects and participating facilities, and discuss future directions. PIPP can be a model for other states seeking to promote nursing home quality either in combination or in place of conventional pay for performance efforts.

THE RELATIONSHIP BETWEEN THE APPROACH OF HOME NURSING SUPPORT OFFICES AND MANAGING AGENCIES IN JAPAN

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Since home nursing care agencies that case managers are associated with are managed by various kinds of institutions, the approaches of home nursing care agencies are different according to the management institutions in Japan. The purpose of this study is to clarify how the approaches of the home nursing care agencies are different according to the management institutions. The research design is a cross-sectional survey using mailed questionnaires. Participants in the study were 436 administrators. As the result of factor analysis of the approaches of the home nursing care agencies, 3 factors were extracted as follows, (1) establishing a good working environment, (2) improving case management practices, and (3) improving working conditions. By designating those three extracted factors as dependent variables and those managing institutions as independent variables, an F-test was performed. As the results of conducting the F-test, there was a significant difference in two factors, "improving management practices" and "improving working conditions," between Corporations and Social Welfare Corporations. Following are F-test results for the approach for improving case management practices between Corporations and Social Welfare Corporations, $F(2,373) = 4.24, P < .05$; and improving working conditions between Corporations and Social Welfare Corporations, $F(2,380) = 3.80, P < .05$. From the above results, it became obvious that Corporations, which are managing the majority of home nursing care agencies, need to make efforts to improve their case management practices and the working conditions of their staffs in order to provide high quality home nursing care services.

THE LONG TERM CARE OMBUDSMAN PROGRAM 15 YEARS LATER: WHAT DOES THE REPORTING SYSTEM TELL US?

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In 1992 The Gerontologist published a national survey of state long term care ombudsman offices in which it was revealed that no standardized reporting form was required and that there was tremendous unevenness across states in what data were collected. Over 15 years much has happened to address the concerns raised. A standardized reporting form is required, reporting systems are computerized, and the potential exists for a comprehensive reporting system as required by the Older Americans Act. Yet, with so much progress in the capacity of state and local programs to collect and report data, a recent study of ombudsman websites reveals that most states do not make their data easily accessible, and the ones that do report different aspects of their work. Collection of critical variables such as client characteristics is not required, leaving gaps in what is known about the vulnerable persons for whom and by whom complaints are lodged. Data reported to the Administration on Aging are still aggregated and sent to the Congress, leaving no capacity for anyone to nationally analyze those data in a meaningful way. Using Kingdom's (1984) Multiple-Streams policy analysis framework, we examine the diverse forces that have (and continue to) influencing the reporting system. We statistically analyze those ombudsman public domain data to reveal what is known at the national level (e.g. types of abuse reported) to make strong recommendations for what changes need to occur in order to continue movement toward a meaningful comprehensive reporting system and accessible database.

STATE AND REGIONAL LONG TERM CARE OMBUDSMAN (LTCO) LEADERS' PERCEPTIONS OF PROGRAM CAPACITY AND CAPABILITY TO PROTECT ELDER CARE RESIDENTS IN A DISASTER

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Recent Hurricanes show that older people suffer and die at higher rates than other groups due to acute disaster phase effects and recovery phase privation. Researchers used two phone survey instruments to assess state LTCO (N = 43, 48 items) and local/regional LTCO leaders' (N = 104, 28 items) perceptions of programs' readiness to handle a range of LTCO disaster roles/functions, integration with emergency planners, and familiarity with elder care disaster resources, laws, rules and protocols. Descriptive data reveal that state/sub-state leaders are moderately to fairly familiar with relevant emergency laws, government disaster checklists, and resources, and that they also feel moderately to fairly well prepared to assist residents during crises. We also examine the LTCOP's experience with disasters, their disaster training record, and perceived training needs. F statistic analysis of variances between the parallel state/regional resource familiarity constructs revealed no significant differences between state and regional LTCOP leaders. Linear regressions revealed multiple variables making significant contributions to seven preparedness dependents with cumulative R-squares ranging from R2 .50 to R2 .78. Important findings included how leader familiarity with the CMS Emergency Planning Checklist for ombudsmen (2007) is strongly tied to knowledge about state emergency plans for LTCOP involvement (Q5, $r = .71$, $p < .01$), familiarity with the checklist for LTC facility disaster planning (Q8, $r = .76$, $p < .01$), and with the state ombudsman's perceived ability to help their sub-state coordinators know where to begin in the event of an actual disaster (Q11, $r = .54$, $p < .01$).

USING ORGANIZATIONAL THEORY TO EXPLAIN DIFFERENTIAL RESPONSE TO NURSING HOME COMPARE

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Nursing Home Compare (NHC) was initiated by CMS with the goal of improving the quality of US nursing homes. Although research suggests that the policy has resulted in quality measure improvements, not all nursing homes have increased quality in response to the policy. One way to understand variation in response to NHC is to consider the organizational contexts in which nursing homes operate. Drawing from organizational theory, this poster will present a theoretical framework and conceptual model that is being used to predict nursing home quality improvement in response to the NHC policy. The framework integrates Resource Dependency and Institutional theories to identify key predictors of organizational response to the policy. Resource Dependency stipulates that the environment in which an organization operates and the dependencies therein influences strategic action. Institutional theory posits that although organizations compete for resources and power, they also compete for legitimacy and social acceptance and face normative pressures to adopt and conform to certain behaviors. The integrated framework suggests institutional conditions can mediate the strength of dependencies. Applying these concepts to the study of organizational response to NHC will allow the researcher to identify patterns of organizational response, as predicted by differing environmental, institutional, and internal factors and the interactions therein.

ACTIVITY AND HOUSEKEEPING STAFFING LEVELS INFLUENCE THE PROBABILITY OF RECEIVING A QUALITY OF LIFE DEFICIENCY CITATION

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A growing body of evidence links higher nursing staff levels with better quality of care in nursing homes. However, the relationship between non-nursing staff levels and quality of life remains largely unexamined. The purpose of this study is to determine if a positive relationship exists between quality of life deficiency citations and activities staffing levels or housekeeping staffing levels. Using the 2007 Online, Survey, and Certification Database (OSCAR) and the Area Resource File (ARF) data of 14,731 U.S. nursing homes, we examined whether housekeeping and activities staff ratios are associated with receiving a quality of life deficiency citation while controlling for market variables (Herfindahl index and unemployment rate) and organizational characteristics (for profit status, chain membership, nursing assistant staffing levels, size, occupancy, percentage of Medicaid residents). Results from fully adjusted logistic regression models indicated that a one unit increase in activities staff (OR=0.46; 95% CI [0.33-0.64]) and housekeeping staff (OR= 0.82; 95% CI [0.73-0.92]) were significantly associated with a decreased likelihood of receiving a quality of life deficiency. Our findings support the hypothesis that higher staffing levels of activities and housekeeping staff can decrease the likelihood of receiving a quality of life deficiency citation. Despite increased costs associated with employing greater numbers of staff, incentives to avoid deficiency citations in combination with increasing the quality of life of nursing home residents may make efforts to increase staffing worthwhile.

NURSING ASSISTANT EXPERIENCES WITH NURSING HOME ANNUAL INSPECTION: THE IMPACT OF NURSING HOME REGULATION IN THEIR DAILY WORK-LIVES AND THE CULTURE OF NURSING HOMES

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This paper addresses nursing assistants' familiarity with traditional criteria for quality of care in nursing homes by listening to their direct experience with nursing home inspection. A grounded theory approach is taken to explore their own experiences with annual nursing home inspections. In-depth and semi-structured interviews were conducted with study participants recruited from local long term care workers' union in Los Angeles, California. The textual level analysis of coding transcribed interviews and conceptual level analysis of extracting concepts and linking codes are performed complementing each other. Nursing assistants identify some discrepancies between the original intention of nursing home regulation and its consequences at the level of their direct interaction with residents. The nursing home survey fails to get down to the care process but mainly focuses on what can be visually examined. Workers think that as long as residents are presented as clean and free of any unnecessary restraints, they have done what is required by the inspection. Nursing assistants interpret the unusual eagerness of nurses and the administrator to help them out during inspections as a way of minimizing the risk of being the object of further investigation. Thus, nursing home inspections deepen the chasm between nursing assistants and the "head department" instead of encouraging more team work and unified efforts to improve quality of care. It is necessary to reframe the nursing home inspection through which state surveyors could provide the strategies to build up more competent direct care workers instead of prescribing highly detailed regulatory standards.

SESSION 435 (SYMPOSIUM)

RESQCARE FORMAL INTEREST GROUP SYMPOSIUM: TECHNOLOGY USE, IMPLICATIONS, AND BENEFITS IN LONG-TERM CARE

Chair: N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Upcoming healthcare reform efforts provide an opportunity to improve the quality of long-term-care services. Technology will be a key tool in this endeavor. However, more needs to be known about technology in long-term care. Accounts of use of health information technology, integrated data systems, electronic medical records, and telemedicine exist, but are fragmented. In this symposium, the scope and scale of health information technology is examined. First, use of technology across multiple long-term care settings is examined in greater detail. This includes specific technologies such as types of telemedicine in home health settings and MDS data systems in nursing homes. Second, implications of technology use in long-term care are also examined in greater detail. Implementation issues such as integration of data systems, reimbursement issues, and availability of technology with the capability to cut across multiple provider settings is discussed. Third, the benefit of technology use in long-term care is also examined in greater detail. This includes issues of cost savings, safety, efficiency, and quality of care.

HEALTH INFORMATION TECHNOLOGY EVALUATION IN NURSING HOMES: RESIDENT OUTCOMES

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In this project, a resident outcome evaluation was to determine the impact of health information technology (HIT) introduction on nursing home residents, using a prospective, quasi-experimental design that derives information from multiple sources. To evaluate the impact on residents, five nursing homes were selected that received the HIT intervention, and five nursing homes were selected to serve as a control group against which results from the HIT nursing homes could be compared. To address the research questions regarding resident outcomes, the CITRA team used recognized instruments that have been found to be reliable and valid in long term care settings with similar populations. Assessments of the participating residents occurred at baseline, before the technology was installed, and nine months after the baseline assessment. Overall, no significant outcomes of introduction of HIT were found, including such outcomes as mortality, falls, affect, and satisfaction with care.

INFORMATION TECHNOLOGY AND QUALITY OF NURSING HOME CARE

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Nursing homes are required to electronically submit resident assessments. This occurs via commercial Minimum Data Set (MDS) software. However, many different software features can be used. This research examines whether more extensive use of this type of Information Technology (IT) is associated with quality of care. Data from a national survey of nursing home administrators (N= 2,397) and Quality Measures from Nursing Home Compare were used. Advanced use of IT was significantly associated with 9 of the 14 Quality Measures, even after controlling for the prior years quality as well as facility characteristics. The use of IT in MDS software packages appears to have some potential for improving quality of care.

WWW.TECHFORLTC.ORG: DEVELOPMENT & EVALUATION OF A WEBSITE RESOURCE FOR LONG-TERM CARE

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This paper will review the multiple methods used to develop and evaluate a website resource directed at helping care providers make informed decisions about purchasing technology products to improve quality of life and care for people in long-term care settings such as nursing homes, assisted living, boarding care, and adult day care programs. The selection of categories of products included in the website and some aspects of website design were driven judgments by a technical advisory group. Care issues include assistance / nurse call, falls, wandering, incontinence, bathing, medication management, and resident lifts and transfers. Formal evaluation of the website, conducted using both heuristic and survey approach with over 100 website users, demonstrated highly positive results. Results of evaluation methods will be presented and discussed as they relate to the burgeoning arena of evaluating resources used to educate long-term care providers about technologies.

SESSION 440 (SYMPOSIUM)

THE INTERSECTION OF BUSINESS & AGING: THE ROLE OF GERONTOLOGICAL EDUCATION IN BUSINESS SCHOOLS

Chair: E. Brucker, *Widener University, Chester, Pennsylvania*

Discussant: L.J. Clark, *Center for Aging Studies, UMBC, Baltimore, Maryland*

Today's business students will be faced with growing challenges and opportunities of working alongside, employing, and retaining older workers. For example, with the recent recession and the market value of 401(k) savings falling, many workers are expecting, and/or needing, to continue working longer. In addition, full social security benefits are now scheduled to be paid at older ages and retirement health costs will increase. Higher elder employment participation rates are likely to help offset an anticipated decline in labor supply growth, yet also increase the challenge of working in a more age-diverse workforce. AGHE is committed to helping to prepare business students by (1) identifying gerontological issues and concepts that will strengthen business students' and professors' awareness of how business will be impacted by the aging society, and (2) developing materials to facilitate the infusion of these topics across the disciplines in business education. This symposium presents the most recent work of the AGHE Task Force on Business and Aging. First, we provide an overview of pertinent issues relevant to business education, based on research and insight conducted by the Task Force. This includes the heterogeneity of older adults, the market share represented by the over 55 population, current and projected trends in employment, and survey data on older workers currently in the labor force. Second, an expert panel discusses strategies to integrate aging topics into business school curricula. We will explicitly focus on integration in existing business courses in human resources, financial services, marketing, and strategic management/entrepreneurship.

SESSION 445 (SYMPOSIUM)

ADAPTATION TO VISION LOSS: A SYNTHESIS OF RECENT EMPIRICAL WORK

Chair: H. Wahl, *University of Heidelberg, Heidelberg, Baden-Wuerttemberg, Germany*

Discussant: S. Sorensen, *University of Rochester, Rochester, Michigan*

There is robust evidence that age-related vision loss is linked with a heightened rate of depression as well as lowered well-being and autonomy. This symposium argues that outcome-oriented research targeting visually impaired older adults deserves a more dynamic view in order

to better understand the interplay of different resources and constraints in the maintenance or loss of adaptation. The symposium's objective is to address different mechanisms assumed to play a key role in terms of adjustment to vision loss: First, findings on the regulation of control strategies underscore the richness of day-to-day adaptation and at the same time support the usefulness of the lifespan theory of control. Second, data on the role of cognitive and personality resources for autonomy and well-being underline that resource allocation is different in age-related vision loss as compared to visually unimpaired older adults. For example, visually impaired older adults more strongly rely on their cognitive resources, whereas the impact of personality of affective outcomes may be weaker as compared to visually unimpaired older adults. Third, results based on a joint German and North American data platform underscore the minor importance of objective vision loss for adaptation to vision loss, whereas remaining functional ability is critical. A fourth presentation addresses fundamental challenges of adaptation in the light of findings on problem solving strategies in visually impaired older adults. The symposium is directly linked with a second symposium (chaired by S. Sorenson), in which psychosocial intervention research with visually impaired older adults will be the target.

COGNITION AND PERSONALITY AS RESOURCES FOR AUTONOMY AND WELL-BEING: THE IMPACT OF VISION STATUS

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This paper investigates the role of cognitive and personality resources for autonomy and well-being, contrasting visually impaired (VI) unimpaired (UI) older adults. We hypothesize that (1) resource allocation is different depending on vision status and that (2) there are consistent as well as differential relationships between resources and outcomes when comparing VI and UI individuals. Findings are based on samples of 121 VI and 150 UI older adults ($M = 82$ years). Assessment relied on established instruments (e.g., WAIS-R, NEO-FFI, PANAS). VI participants were found to be significantly less extraverted than UI participants. Cognitive resources and autonomy, in particular subjective autonomy, were more strongly related in the visually impaired group as compared to the UI group. Higher extraversion predicted less negative affect only in the VI group. It is concluded that interventions should consider the resource status of clients in order to enhance outcomes.

SELF-REPORTED STRATEGY USE BY DISABILITY LEVEL: AN APPLICATION OF THE LIFE-SPAN THEORY OF CONTROL USING NARRATIVE DATA

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This study applies the life-span theory of control (Heckhausen & Schulz, 1995) to examining daily challenges (e.g., problems reading) and coping strategies of 364 older adults with macular degeneration using narrative data. Almost all participants reported using compensatory strategies that provided alternatives (e.g., human or technical assistance) for dealing with current challenges (Compensatory Primary Control); and most used self-protective compensatory strategies (e.g., downward social comparisons; Compensatory Secondary Control). Strategies involving time and effort (Selective Primary Control) were used by half of the participants, while motivational strategies (Selective Secondary Control) were the least reported. Differences in strategy use by vision impairment level were identified for individual strategies within the main categories; for example, greater use of strategies involving help from others and maintaining a positive outlook were associated with greater disability, whereas attempts not to dwell on vision-

related problems were associated with lower impairment levels. Conceptual and empirical implications are discussed.

PSYCHOLOGICAL ADAPTATION TO ACCUMULATING VISION LOSS: ADAPTING OF OR ADAPTING TO CHANGE IN FUNCTIONAL ABILITIES?

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To investigate psychological adaptation to age-related vision loss (AVL), data from two longitudinal samples of elders suffering from age-related macular degeneration (AMD) from New York ($N=361$) and Heidelberg ($N=90$) were analyzed. The psychological outcome was operationalized in terms of Horowitz and Reinhardt's (1998) AVL concept. We hypothesized that impacts of objective visual acuity losses on the AVL outcome are largely mediated by perceived functional vision losses (FVL) and functional abilities to conduct activities of daily living (ADL). Structural equation modeling was used in cross-sectional analysis of baseline relationships, as well as in longitudinal analyses of latent one-year change scores. Results confirmed the hypothesized mediation effects. Moreover, we found evidence of an adaptive reduction of psychological responsiveness to vision losses and ADL decline with ongoing advancement of AMD, weakening the impact of vision losses on the AVL outcome when higher levels of vision loss have been "reached".

SOCIAL PROBLEM SOLVING AND PREPARATION FOR FUTURE CARE AMONG OLDER ADULTS WITH LOW VISION

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Both Social problem solving (SPS), a cognitive-behavioral process used to cope with everyday problems, and Preparation for Future Care, a process of anticipating and planning for future care needs (PFC), are often impaired in people with vision loss. We piloted a Preventive Problem Solving Intervention to teach older adults to (1) generate and implement solutions for current problems and (2) develop risk and options exploration, preference formation, and concrete future planning. Twenty patients aged 69-94, 67% female, received in-home training. In paired t-tests, Positive Problem Orientation increased and Negative Problem Orientation and Impulsiveness-Carelessness Style decreased during the intervention. Global Preparation for Future Care (PFC) and Decision Making increased, whereas Avoidance of future needs decreased; psychological well-being improved. Both SPS and PFC can be improved through training. The association of changes in PFC with well-being improvements point to the importance of focusing both on current and future-oriented problem solving.

SESSION 450 (PAPER)

ALL IN THE FAMILY: INTERGENERATIONAL RESOURCES

GRANDPARENT RESOURCES AND INEQUALITY AMONG CHILDREN

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The potential contribution of grandparents to the well being of children in the U.S. probably is greater now than at any previous time in history. However, this aggregate picture of increasing grandparent resources obscures the heterogeneity in access to grandparent resources among children. While some children have four healthy, well-educated, affluent grandparents, others have fewer and/or less resourceful grandparents. This study contributes to our understanding of how grandparents may differentially affect the well-being of children and thereby accen-

tuate inequality. In particular, it explores the relationship between family environment of children and the resources of their grandparents. Inequality in children's resources has always existed, but disparities have grown larger in recent decades. Measures of children's resources generally focus on parental resources and ignore contributions from grandparents. Data could be collected to carefully assess the net contribution of grandparents to the well-being of their grandchildren, but no such data exist. It is possible, however, to use existing data to partially examine this issue. The strategy in this paper is to use data from wave 2 of the National Survey of Families and Households to examine how grandparent resources are related to characteristics of the family within which children are living. Indicators of family resources for children are parent's education, marital status, and income. Measures of grandparent resources that can potentially benefit their grandchildren are: grandparent's education, health, financial well-being, marital status, and number of grandchildren. Logistic regression results show that grandparents tend to increase inequality among children. Implications of this are discussed.

FAMILY MATTERS: FINANCIAL AND TIME TRANSFERS BETWEEN GENERATIONS

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Access to social and material resources and welfare services are important conditions for family transfers of economic and social support. Financial transfers are usually passed from older to younger generations at the same time transfers in terms of instrumental support go in both directions. This paper presents findings about intergenerational transfers in Sweden. The Swedish case is interesting because private transfers within the family relate both to welfare state provisions and the family as an evolving social institution. In Sweden almost all intergenerational transfers are downward, from older to younger generations. In higher social class families, parents who earlier had more frequent contact with their children were more likely than those having less contact to later provide financial transfers, demonstrating that children who invested time in their elderly parents were more likely to be financially rewarded by them. However, analyses show that children who earlier received financial transfers from parents were no more likely than those who did not receive such transfers to later have frequent contact with their parents. In regards to needs of the younger generation, we found that among higher social class families single parents and students more often were beneficiaries of financial support. But children who were unemployed, lacked a cashmargin or reported poor health were not more likely to receive transfers. Additionally, children who experienced adverse childhood conditions were less often recipients of financial support. We will discuss these findings from a class and gender perspective in the context of the Swedish welfare state.

THE IMPACT OF RURAL-URBAN MIGRATION ON FAMILIAL ELDER CARE IN RURAL CHINA

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Currently in China, tens of millions of rural young laborers have been migrating to urban areas to meet the demand for cheap labor, whereas large numbers of elderly parents (the Chinese baby boomers) are left behind in the impoverished villages. This study took a systematic look at how the increasing rural-urban migration shaped the elder care practices in rural Chinese families and how rural elders respond and adapt to this social transformation. Using data from a rural household survey conducted by Renming University in 2004 in three in-land

migrant-exporting provinces, this study explored three aspects of elder-care dynamics in China: 1. The patterns of financial care for rural elders whose adult children had migrated to urban areas. 2. Rural elders' perceptions of filial piety at this time of social change. 3. Rural elders' self-evaluation of life satisfaction at this historical period of time. Findings from this study revealed that financial care by migrated children was mainly based on an exchange-based model; rural elders who took care of grandchildren received more financial support. With the continued provision of financial care and emotional care, rural elders continued to hold relatively positive evaluation of their migrated children's filial piety, even though physical care was absent. Finally this study found that the exchange-based pattern of financial care and the continuation of filial piety had a positive impact on rural elders' life satisfaction. This study contributes to the knowledge body of elder care in China and provides insightful policy suggestions for the Chinese government.

COMPETITION BETWEEN GRANDPARENTS AND GRANDCHILDREN: A VIGNETTE STUDY ON ELDERS' BELIEFS IN FILIAL OBLIGATION IN RURAL CHINA

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This paper used vignette design to study how elders evaluate the priority of grandparents and grandchildren when they compete for limited financial resources of the middle generation. Particularly, we examined how migration from rural and urban area influenced elders' beliefs. Based on a three-wave longitudinal study in Anhui Province, China, with data collected in 2001, 2003, and 2006, we used multinomial logistic regression to predict how elders evaluated the priority of the vignette grandparent and grandchildren to get help from their children. We found that grandparents got higher priority when they need to have an operation for bone fracture instead of paying for medication for arthritis, and grandchildren got higher priority when they need an operation for bone fracture instead of paying for tuitions. Grandparents get higher priority in their claim to sons' resources. Whether grandchildren are male or female did not make a difference. However, grandsons got higher priority when they competed with their paternal grandparents. Elders who lived in skipped-generation households with grandchildren tended to give priorities to grandchildren in the vignette, elders who received more financial support from children were more likely to give grandparents higher priority, and those who did not have a child in the village ranked grandparents' priority higher.

HEALTH OF THE ELDERLY IN INDIA: DO LIVING ARRANGEMENTS PLAY A ROLE?

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Population aging has long been identified as a critical problem in many developed countries. Indeed, the phenomenon of aging is more recent in developing countries due to their historically high fertility and mortality rates, and it is only in the past few decades that they are beginning to witness the demographic transition. In India, the population of the elderly and the oldest-old is projected to rise remarkably in the coming decades. In the absence of any public social security in the country, a large proportion of the elderly co-reside with their adult children. However, an increase in the number as well as the longevity of elders might create pressures on their traditional sources of support. Even as they continue to live in extended households, it is not clear whether they are adequately taken care of by their adult children; or if their health needs are sufficiently met. Using three waves of a repeated cross-section survey, the National Sample Survey (NSS), spread over three decades, I examine the differential impact of various living arrangements on the health outcomes of the elderly. I also examine whether the relationship varies significantly among religious and caste groups. Preliminary analyses using a single wave of a different cross-section survey, the Indian Human Development Survey, 2005 (IHDS), show that

controlling for all relevant variables, living with at least one adult child decreases the probability of both short-term and long-term morbidity.

SESSION 455 (PAPER)

BIOMARKERS AND COGNITIVE FUNCTIONING

AGE-RELATED DIFFERENTIAL ITEM FUNCTIONING ON THE TEST OF FUNCTIONAL HEALTH LITERACY IN HIV-POSITIVE OLDER ADULTS

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The Test of Functional Health Literacy in Adults (TOFHLA) is a widely used health literacy measure. The TOFHLA evaluates health-related reading comprehension by requiring the person assessed to supply words missing in passages of health-related prose (cloze procedure). Older persons may be more affected by this testing strategy compared to younger persons because of its demands on working memory and working memory load of text has been shown to negatively affect older persons' reading comprehension. Adults over 50 living with HIV may have infection-related deficits in working memory as well. We hypothesized that these factors might result in age-related differential item functioning (DIF) on the TOFHLA among older persons living with HIV. DIF is said to exist for a test item when correct responses on it depend on something other than the ability assessed, such as gender, ethnicity, or age. Thirty-eight persons aged 23 to 30 and 57 persons 50 to 67 years of age contributed scores on the TOFHLA. Nonparametric item response theory (IRT) methods were used to evaluate age-related DIF. Based on established cutoffs, 25 of the 50 TOFHLA reading comprehension items showed evidence of significant age-related DIF. In several instances in these data DIF could clearly be related to an item's demands on working memory. Our results suggest that results from the TOFHLA should be interpreted with caution in older persons living with HIV and that cut-off scores based on younger persons' performance may be inappropriate for them.

OBESITY AND COGNITION AT OLDER ADULTHOOD: CROSS-SECTIONAL AND LONGITUDINAL EVIDENCE

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Cognitive performance declines with aging, and impaired cognition is a major health problem that imposes substantial economic burdens, and that has become a key concern in national health and economic policies. Old-age obesity is prevalent and increasing. Despite the well-documented adverse health effects of obesity, studies on the consequences of obesity on cognition at old-age are limited, but they suggest that obesity might have a deleterious effect on cognition. The old-age frailty literature shows that body weight declines with age, and that involuntary weight loss is a strong risk factor for health deterioration and mortality. The relationships between body weight and cognitive functioning are largely unexplored. We explore the effects of excessive body weight on cognition among older Americans using the Health and Retirement Study (1992-2006). Cognitive performance measures are test scores in multiple domains of cognitive evaluations: mental status, working memory, verbal memory (immediate and delayed word recall). We find a strong positive cross-sectional relationship between body weight and cognitive performance. Adjusting for unobserved individual heterogeneity with an individual fixed effect model and the first-difference estimation, we find a strong negative longitudinal relationship between excessive body weight and cognitive performance. This finding is robust to the adjustment for the potential endogenous nature of excessive body weight with a linear dynamic model with the Generalized Method of Moments estimation. A host of robustness checks are performed and potential mechanisms and policy implications are discussed.

OXIDATIVE STRESS, COGNITIVE FUNCTION AND MEDICATION ADHERENCE AMONG INDIVIDUALS WITH HYPERTENSION

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The purpose of this study was to examine the associations between oxidative stress, performance on a battery of age sensitive cognitive assessments and medication adherence among individuals prescribed at least one daily antihypertensive agent for the treatment of hypertension. Forty-two participants (M = 69 years of age) completed a 12-hour urine collection for urinary isoprostanes, which was used as an indicator of oxidative stress. Participants completed a battery of cognitive assessments and 8 weeks of electronic medication monitoring to one antihypertensive agent. Oxidative stress was significantly and inversely associated with logical memory both immediate ($r = -.38, p < .01$) and delayed recall ($r = -.42, p < .01$), and recognition memory ($r = -.42, p < .01$) from the Wechsler Memory Scale III. Oxidative stress was also associated with increased perseveration errors ($r = .26, p < .05$) and fewer categories achieved in the Wisconsin Card Sorting Test (WCST) ($r = -.26, p < .01$). Importantly, oxidative stress was associated with medication adherence ($r = -.34, p < .05$). These findings suggest a potential causal mechanism for age-associated cognitive decline and consequent effects on a functional outcome, in this case taking medications as prescribed.

C-REACTIVE PROTEIN (CRP) IN LATE ADULTHOOD: AN INFLAMMATORY MARKER OF COGNITIVE DECLINE?

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C-Reactive Protein (CRP) is a protein implicated in immune response. Increased levels of CRP have been recognized as a marker of inflammation. Some studies suggest that higher levels of inflammatory proteins may be associated with cognitive change in late adulthood, but overall prior findings are mixed. The association of a single measurement of CRP and longitudinal changes in cognitive performance in late life was examined in a sample of Swedish twins ($n=871$) belonging to one of three studies: the Swedish Adoption/Twin Study of Aging (SATSA), the Sex Differences in Health and Aging Study (GENDER), and the Origins of Variance in the Oldest-Old (OCTO-Twin). Spline growth curve models with two linear growth rates were used to examine the relationship between CRP levels measured from stored serum samples taken between the ages of 53 and 94 with cognitive performance measured up to five occasions between the ages of 52 and 100. The four cognitive tasks considered (Synonyms, Block Design, Symbol Digit, and Thurston Picture Memory) represented verbal ability, spatial ability, perceptual speed, and episodic memory domains. Initial growth curve analyses suggested no significant associations between CRP levels and longitudinal performance for perceptual speed or episodic memory. However, higher serum CRP levels were associated with worse performance on verbal and spatial ability and with change in verbal ability prior to age 65. These associations stay the same excluding those with dementia diagnoses. The current results provide limited support for the role of inflammation on cognitive aging in late life.

BEHAVIORAL HEALTH CHOICES AND THEIR EFFECTS ON COGNITION OVER TIME

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This study explored the effect of behavioral health choices (exercise, smoking, and alcohol use) on cognition over a 12 year period. Data from

the Health and Retirement Survey (1992 & 2004) was utilized to examine whether engaging in these health choices affected measures of fluid and crystallized intelligence similarly. Further, it was hypothesized that an overall measure of cognitive ability would not adequately measure effects observed in fluid and crystallized abilities. A multinomial logistical regression was used to account for five binary outcomes: three levels of ability, proxy, and vital status. Individuals that reported exercising often at baseline have decreased odds of 43% for a low fluid intelligence score twelve years later. Those who never smoked or quit smoking have decreased odds (27% and 29%) of a moderate versus a high fluid intelligence score. The odds of requiring a proxy versus a high fluid score decrease 48% those having never smoked and 54% for those who quit smoking. Behavioral health choices had effects on fluid intelligence scores that were not captured by an overall cognition score. Tests of cognition that are heavily weighted with crystallized intelligence items may mask changes in ability over time.

SESSION 460 (PAPER)

DECIDING TO INSTITUTIONALIZE

I MIGHT BE AHEAD TO GO TO THE NURSING HOME: ANTICIPATED RELOCATION OF AN OLD HOMEBOUND RURAL WOMAN

E.J. Porter, *University of Missouri, Columbia, Missouri*

Relocation is typically studied from the epidemiological perspective of population transitions in living arrangements or qualitatively, by interviewing older persons who have relocated to a residential facility. Little is known about what it is like to contemplate relocation; anticipated relocation has not been viewed as a chronic stressor. During an 18-month study of the experience of reaching help quickly with 40 women, one 90-year old woman spontaneously reflected about a long-contemplated move to the only nursing home in her town. A phenomenological method was used to describe facets of life-world the woman associated with anticipated relocation. Data revealed a remarkable collection of dialectics: *detecting my deterioration/ pointing out my progress since that surgery, acknowledging that I do not have that much time left/ foreseeing a time when I might not be able to do that, and continuing to live at home alone/ having had reasons for thinking about moving out of this house.* Her residential career in the community, her deceased husband's involvement with the nursing home, and her financial stake in it were factors, as was the physician's repeated suggestion that she relocate there. Reasons offered for *staying at home yet this winter* revealed what she would give up and what she might have to endure if she relocated. As she grew ever older while living alone, anticipated relocation to a residential facility became a chronic stressor. Researchers should explore the extent to which others older persons experience that stressor and describe its health and social implications.

ALZHEIMER'S CAREGIVERS' DESIRE TO INSTITUTIONALIZE AS A MEDIATOR OF QUALITY CARE AT 6-MONTHS

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Predicting institutionalization has been an important focus of dementia caregiving research. The caregiver's (CG) desire to institutionalize (DTI) the care recipient (CR) is increasingly accepted as a precipitating factor for future placement. However, the impact of DTI on the quality of care (QOC) being provided in the home has not been examined. We hypothesized that baseline DTI would mediate the relation between traditional indicators of psychosocial caregiving burden/distress (e.g., depression, behavioral bother, burden, absence of positive aspects of caregiving) and the QOC [i.e., exemplary care, potential for harm (PFH)]

provided at 6-month follow-up. Data from minimal-support control group CGs (N = 319) in the Resources for Enhancing Alzheimer's Caregiver Health-II (REACH-II) clinical trial were included in a series of regressions (Baron & Kenny, 1986) that controlled for CG demographics, subjective health, and CR cognitive impairment. Results indicated that DTI partially mediated the relation between behavioral bother, burden, and absence of positive aspects of caregiving and PFH. Sobel test statistics indicated significant mediation for each predictor except CG depression. Interestingly, the mediation was not evidenced for exemplary care (although main effects of DTI and indicators of burden/distress were observed). Based on these analyses, DTI should be considered more than a proxy for future placement. It may also be an important predictor of the QOC being provided in the home. Researchers and practitioners should consider assessing DTI when working with families in the transition from home care to placement, particularly for those at risk for potentially harmful or compromised care.

ADULT CAREGIVING AMONG AMERICAN INDIANS: THE ROLE OF CULTURAL INDICATORS

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Little is known about caregiving issues among American Indians. We conducted a study on adult caregiving with a large sample of American Indians, including an examination of the role of cultural indicators in the propensity to be a caregiver. To our knowledge, this is the first such study conducted among American Indians. Data come from a cross-sectional study of 5,207 American Indian adults residing on two closely related Lakota Sioux reservations in the Northern Plains and one American Indian community in the Southwest (Arizona). Cultural indicators include measures of cultural identity and traditional healing practices. Seventeen percent of our sample reported being caregivers, and a larger proportion of participants in the Northern Plains were more likely to be caregivers than those in the Southwest. Compared to noncaregivers, caregivers were younger and more likely to be female and married. Unadjusted analyses indicated that a larger percent of caregivers compared to noncaregivers attended and participated in Native events ($p < 0.01$) and engaged in all three traditional medicine healing practices ($p < 0.01$). Adjusted analyses showed that caregivers compared to noncaregivers had a 30% increased odds of speaking at least some Native language at home and a 2.5-increased odds of engaging in traditional medicine practices. Regional stratification of analyses indicated sex differences in caregiving odds ratios in the Northern Plains but not in the Southwest. Our findings support the notion that greater cultural identity is related to caregiving in our sample, and that future studies and interventions should pay special attention to this dynamic.

PREDICTING INSTITUTIONAL PLACEMENT AMONG DEMENTIA CAREGIVERS

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The early institutionalization of older adults is of concern to practitioners, researchers and policymakers alike. Although research has identified both caregiver (CG) and care recipient (CR) predictors of institutionalization, little research has focused on measures for use in the clinical setting that may help practitioners identify and intervene with

CGs considering institutionalizing their CR. One such measure is the Desire to Institutionalize scale (DTI) developed by Morycz (1985). This brief scale asks CGs to answer 6 yes/no questions related to how soon they expect to place their CR in an institution. The DTI scale has been found to be predictive of actual placement in previous studies. Using secondary data from the NIH-funded Resources for Enhancing Alzheimer's Caregiver Health (REACH) II study (N = 640), we examined the relations between predictors of institutionalization identified in previous research, DTI and actual institutional placement during the course of the study. Correlation analyses were initially conducted to determine variables that were significantly related to Placement and only those that were significantly related to Placement were included in the analyses. Using logistic regression analyses both CG Burden and DTI were found to be significantly related to Placement when controlling for CG race/ethnicity, income, and ADL/IADL need. However, when Burden and DTI were entered into the same regression model, only DTI remained significant. Results support previous studies that indicate the DTI scale is a reliable predictor of institutional placement and suggest that this predictive ability extends beyond predictors previously identified in the literature (e.g., burden).

SESSION 465 (SYMPOSIUM)

FAMILY CAREGIVERS' INVOLVEMENT: A CREATIVE FUTURE DIRECTION IN CANCER CARE

Chair: Y. Kim, *Psychology, University of Miami, Coral Gables, Florida*
Discussant: T. Blank, *University of Connecticut, Storrs, Connecticut*

Cancer touches not only cancer patients but also their family caregivers, influencing diverse aspects of their quality of life. This symposium deals with these concerns from a family system's perspective, to provide comprehensive views related to the quality of life of cancer patients and caregivers. Dr. Hendrix illustrates the efficacy of individualized bedside training for family caregivers of older cancer patients in improving the quality of life of both patients and caregivers. Dr. Rose identifies patterns and predictors of family caregivers' engagement in supportive communication resulting from a tailored intervention targeted for advanced cancer patients and caregivers. Dr. Given highlights the significance of family caregivers' involvement in patients' symptom management and the effectiveness of this involvement in reducing depression of patients and caregivers. Dr. Kim further pinpoints the importance of lifestyle behaviors (healthy diet and physical activity) in the quality of life of each person in a cancer survivor-spousal caregiver dyad, which has significant implications for developing lifestyle behavioral interventions targeted to cancer patients and family caregivers. In his discussion, Dr. Blank identifies the unique challenges each person in the family deals with, as a cancer patient or caregiver. He also contrasts and compares the findings from diverse subpopulations of cancer patients. He discusses the implications of these findings as a creative approach to improving overall quality of life of patients and family caregivers, suggesting future directions for research.

INDIVIDUAL AND DYADIC EFFECTS OF HEALTHY LIFESTYLE BEHAVIORS ON QUALITY OF LIFE AMONG CANCER SURVIVORS AND THEIR SPOUSES

Y. Kim, *Psychology, University of Miami, Coral Gables, Florida*

One ultimate goal of survivorship would be preventing from major illnesses of the survivor and their family members by fostering healthy lifestyle behaviors. This study examined the extent to which healthy lifestyle behaviors, namely, fruit and vegetable consumption (FVC) and duration of physical activity (DPA), cancer survivors and their spousal caregivers were engaging in was related to the quality of life of each person as well as partner. APIM results using data of 320 survivor-caregiver dyads from a national survey revealed that survivors' FVC related to their better mental health and caregivers' FVC related to their better mental and physical health. In addition, survivors' DPA related

to their better mental and physical health and caregivers' DPA related to their better physical health. Results suggest that longer duration of physical activity for survivors and more servings of FVC for caregivers should be encouraged to improve their quality of life.

HOW DOES CAREGIVER DEPRESSION INTERACT WITH INTERVENTIONS TO INCREASE CAREGIVER INVOLVEMENT IN MANAGING SYMPTOMS AMONG THEIR PATIENTS RECEIVING CHEMOTHERAPY

B.A. Given, C.W. Given, *College of Nursing, Michigan State University, East Lansing, Michigan*

Two hundred and five caregivers and their patients with cancer undergoing chemotherapy, were enrolled into a two arm trial. All caregivers received interventions to assist patients. We examined factors related to caregivers offering assistance to help their patients manage symptoms. Patients with symptoms over a pre-set threshold at baseline received help from their caregivers. Non-spouses offered more assistance than spouse caregivers. When interactions between caregiver depression and numbers of interventions delivered was examined, we found that among caregivers with high levels of depression, the delivery of interventions had no impact on the amount of assistance offered. However, when caregivers with low levels of depression received interventions to manage patients symptoms, those who received interventions were significantly more likely to assist their patients. The implications are strong, depressed caregivers are much less likely to implement interventions to assist family members to manage cancer related symptoms.

PROMOTING SELF-EFFICACY AND PREPAREDNESS IN CAREGIVERS OF OLDER CANCER PATIENTS BEFORE HOSPITAL DISCHARGE

C.C. Hendrix, A. Abernethy, L.R. Landerman, *School of Nursing, Duke University, Durham, North Carolina*

Many family cancer caregivers lack confidence and are ill-prepared to assist their loved ones after hospital discharge because of limited preparation. Based on Bandura's self-efficacy framework, we hypothesized that an individualized, experiential training can increase self-efficacy and preparedness among caregivers. Therefore, the specific aim of this study was to examine the effects of this training on self-efficacy and preparedness in symptom management and home care of informal caregivers, and on symptom distress of cancer patients. Data analysis revealed that there was a significant improvement in caregiver self-efficacy immediately after training ($t = -7.24, p < .0001$) and was sustained at 1, 2, and 4 weeks of hospital discharge ($t = -5.31, p < .0001$; $t = -4.81, p < .0001$, and $t = -4.45, p < .0001$, respectively). Similar trend was observed in the levels of caregiving preparedness. Further analysis will look at the correlation between caregiver and patient variables.

PREDICTORS OF CAREGIVER ENGAGEMENT IN A COPING AND COMMUNICATION SUPPORT INTERVENTION FOR ADVANCED CANCER PATIENTS

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We examined patterns and predictors of family caregiver (FCG) engagement and problems raised in a coping and communication support (CCS) intervention tailored to preferences of advanced cancer patients and FCGs. FCGs (N=158) were identified by study patients being treated in two cancer clinics providing care for underserved populations. Baseline FCG data were used in negative binomial regression analysis to predict FCG contacts with CCS practitioners (CCSPs) and problems raised with CCSPs over the first two months of intervention. FCGs living with patients had greater engagement (more contacts). More psychological issues were raised by FCGs who were male and/or had more needs met by the patient's health care providers (HCPs). FCGs

with a lower blunting style raised more existential issues. Less depressed FCGs mentioned more problems with HCPs. More practical issues were cited by FCGs who had lower incomes, lower blunting styles, and/or more needs met by the patient's HCPs.

SESSION 470 (SYMPOSIUM)

GENDER AND AGING: OLDER MINORITY WOMEN'S HEALTH, INCOME SECURITY, AND FAMILY RELATIONS

Chair: L. Mjelde-Mossey, *Gerontology Center, The University of Colorado at Colorado Springs, Colorado Springs, Colorado*

Discussant: C.M. Mehrotra, *The College of St. Scholastica, Duluth, Minnesota*

The objective of this symposium is to highlight some of the unique gendered circumstances associated with being an older minority woman in the United States. Whether U.S. or foreign-born the women share some of the same challenges. Older minority women are more likely to be poor, have more health limitations, and experience cultural shifts in their traditional family roles. Even though the most recent U.S. census reported that 82% of those over age 55 are white, the proportion of older minorities is increasing and, since women outlive men in all ethnic and racial groups, there is a growing need to know more about the specific concerns of older minority women. The invited papers in this symposium focus on health, income security, and family relations. One paper reports on Chinese grandmothers who have immigrated to the U.S. and ways in which the grandmothers maintain positive relations with their grandchildren who remain in China. Another paper reports the structural, educational and language barriers to life-long income for older Mexican-origin women and their effects upon income security in old age. Two other papers focus on disability and oral health. One reports gender differences in the onset of limitations in ADLs for Black, Hispanic and White older adults. The oral health study presents the effects that culture, oral health beliefs, and oral health practices have upon the oral health of older Chinese, East Indian, Black, and white women.

CAN OLDER HISPANIC WOMEN AFFORD TO GROW OLD? INFLUENCES OF MARRIAGE, WORK, AND IMMIGRATION

J.L. Angel, J. Montez, R. Angel, *Department of Sociology and LBJ School, University of Texas at Austin, Austin, Texas*

For women, and especially for those whose culture places great value on the family and defines a woman's core roles as those of wife and mother, dependency on a male partner is common. Yet given limited earnings and the lack of benefits among Hispanic males, for many Hispanic women marriage is no guarantee of economic security or access to health insurance or retirement income. As is the case for lower class African-American women, for a large fraction of Hispanic women the traditional male breadwinner model of family economic security no longer operates, if indeed it ever did, and the future marriage market for Hispanic females may operate very differently than it has in the past. Yet even as employment becomes the norm for women, as is the case for men, race and ethnicity structure employment opportunities unequally, a situation that results in unequal access to material and social resources including retirement plans and health insurance. In this study, we examine the situation of adult Hispanic women and ask how their access to benefits is affected by marriage, as well as their own employment as they age. We combine Current Population Survey data from several years to produce reliable estimates of the financial vulnerability of Mexican-origin women. The results show that older foreign-born Mexican-origin women face multiple employment barriers including low educational levels, low levels of English proficiency, the nature of the jobs they hold and the number of hours they work, as well as the labor market opportunities in the region, state, and locality in which they live. The analyses also reveal that a large fraction of these women may outlive their resources and find themselves dependent on children

or the state. The research findings are discussed in relation to their implications for providing income support in old age for Hispanics.

GENDER VARIATIONS IN THE ONSET OF FUNCTIONAL LIMITATIONS: DO BLACK, HISPANIC, AND WHITE AMERICANS DIFFER?

B. Wu¹, L. Wei³, J. Liang², 1. *Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina*, 2. *University of Michigan, School of Public Health, Ann Arbor, Michigan*, 3. *Centers for Disease Control and Prevention, Atlanta, Georgia*

This study examined gender differences in the onset of lower body disability (LBD) and limitations of Activity of Daily Living (ADL) across Black, Hispanic, and White Americans. Data came from six waves of the Health and Retirement Study (HRS 1996-2006) including 6,673 persons aged 51 and above with no functional limitations at baseline in 1996. Generalized Estimating Equation (GEE) models were used in the study. We found that females were more likely to develop onset of LBD for all three ethnic groups. In addition, white and Hispanic females were more likely to develop ADL limitations. But the association did not find among blacks. On the other hand, the results from survival analysis showed that women had 48% lower mortality risk than male counterparts. This study suggests the importance of reducing risk of developing functional limitation and increasing active life expectancy for women across ethnic groups.

GRANDMOTHERS-GRANDCHILDREN RELATIONSHIP AMONG OLDER CHINESE IMMIGRANTS IN LOS ANGELES

L. Xu, I. Chi, *USC, Monterey Park, California*

Being a grandmother is an important social role to older woman and her grandchildren in Chinese families. This present study explores whether older Chinese women could maintain this relationship with their grandchildren after they migrated to the United States. Four focus groups of Chinese immigrant women, aged 65 or above residing in Los Angeles who have grandchildren under 25 years old, were conducted in 2008. The results showed that grandmothers maintained close relationship with their grandchildren. Most grandmothers considered that grandchildren are very important to them. They either talked on the phone or met their grandmothers weekly or monthly. Even though communication barriers existed, most grandmothers coped with them by either changing their behaviors or lowering their expectations. Grandmothers thought that their grandchildren were filial to them. In conclusion, the immigrant Chinese grandmothers still played an important role in their families by keeping cohesive relationship with their grandchildren.

CULTURE, ORAL HEALTH STATUS, AND QUALITY OF LIFE AMONG OLDER MAJORITY AND ETHNIC MINORITY WOMEN

A. Kiyak, *Institute on Aging, University of Washington, Seattle, Washington*

Objective: To assess the relationship between ethnicity, oral health status, perceived well-being among older women in Canada and U.S. enrolled in a clinical trial. Methods: Older Canadian or U.S.-born women in the U.S., China or India-born women in Canada were interviewed re: oral health behaviors, perceived risk for diseases, oral health-related quality of life, depression, and examined re: OH status. Results: Chinese women reported the lowest QoL among Canadian ($p < .04$) and U.S. women ($p > .001$), and scored highest on depression ($p < .04$ in Canada, $p < .02$ in U.S.). They had more teeth ($p < .03$ in U.S., $p = .06$ in Canada), more root decay ($p < .04$) than Indian women in Canada, and more than Caucasians and Blacks in the U.S. ($p < .003$). Discussion: Results suggest that health beliefs, behavior, and oral health status vary among cultural and immigrant groups; older Chinese women are at greatest risk.

SESSION 475 (SYMPOSIUM)

GENDER AND CARE UTILIZATION: DIFFERENT PATTERNS FOR DIFFERENT PROVIDERS

Chair: M.G. Parker, *NVS, Aging Research Center, Stockholm, Sweden*
Discussant: P. Rieker, *Boston University, Boston, Massachusetts*

Care utilization is the result of a complex process involving need, behavior and access. These three elements have both individual and societal dimensions, and all three are strongly influenced by gender. The elements also differ depending on the kind of service provided. This symposium will describe and analyze gender differences in a variety of elder care services. Patterns emerging from different providers may help us understand the roots of gender differences. A Dutch study shows that women are twice as likely as men to use professional home care, a difference that remains when controlling for numerous factors including health, living situation, personality and care preferences. A U.S. based study shows that women with Stage I/II lung cancer are significantly less likely to receive timely and appropriate treatment as compared to men. A Swedish study used a national dispensed drug register to look at gender differences in inappropriate drug use (IDU). Women are more likely to have IDU when adjusting for age, education and number of drugs. Another study from Sweden finds no gender difference in physician visits. However, elderly men visit dentists more often than women even when adjusting for age, marital status, education and health. The symposium will include a discussion of the challenges of investigating gender differences in care utilization among elderly people and how the intersection of needs, behavior and access may differ for men and women, and that gender patterns may differ by provider.

RACE AND SEX DIFFERENCES IN THE TIMELY AND APPROPRIATE TREATMENT OF LUNG CANCER

L.R. Shugarman¹, K. Mack¹, M. Sorbero², H. Tian¹, A. Jain³, J. Ashwood², S.M. Asch¹, 1. *RAND Corporation, Santa Monica, California*, 2. *RAND Corporation, Pittsburgh, Pennsylvania*, 3. *RAND Corporation, Washington, District of Columbia*

This study aimed to evaluate the relationship of sex and race with the receipt of timely and clinically appropriate non-small cell lung cancer (NSCLC) treatment for each stage of diagnosis. SEER cancer registry data were linked to Medicare claims for beneficiaries diagnosed with NSCLC between 1995-1999 to examine disparities in treatment while controlling for other demographic characteristics, comorbidities, SES, and provider supply (N=22,145). Among Stage I/II patients, women were 25% less likely to receive timely surgical resection than men. Although race disparities were found for treatment of later-staged NSCLC, we found no evidence of continued negative effects for women. Variations in appropriate, timely treatment were found within and across stages of diagnosis, confirming that sex and race differences in NSCLC treatment exist. However, these differences are not consistent, suggesting different approaches may be needed for addressing disparities in NSCLC treatment.

GENDER DIFFERENCES IN THE USE OF PROFESSIONAL HOME CARE: THE IMPACT OF HEALTH, PERSONALITY AND SOCIAL FACTORS

M. Broese Van Groenou¹, D.J. Deeg², 1. *VU University, Amsterdam, Netherlands*, 2. *VU Medical Center, Amsterdam, Netherlands*

The behavioural model of Andersen and Newman predicts that gender differences in need (health), disposition (personality and care preferences) and enabling factors (social context) explain why women more often use professional home care than men. Data from the 2001/2002 wave of the Longitudinal Aging Study Amsterdam show that women, compared to men, are in worse health, have less strong personalities, more often prefer professional care over informal care, are more often single and with low income. Logistic regression analyses show that older women are twice as likely as men to use home care (OR=2.19). The odds

are decreased only slightly when adjusting for dispositional factors or social context. Adjusting for all factors still leaves a statistical significant gender difference in the use of home care. It is discussed what other factors may explain that older women use professional home care more often than men.

GENDER DIFFERENCES IN VISITS TO THE DOCTOR AND DENTIST

M.G. Parker, P. Schön, I. Gripe, *NVS, Aging Research Center, Stockholm, Sweden*

This study investigates gender differences in visits to the doctor and the dentist in the past 12 months. The study was based on SWEOLD, a nationally representative interview survey of persons aged 77+ in 1992 and 2002 (n= 973). Logistic regression analysis showed no significant gender difference in visits to the doctor, after controlling for age, education, civil status, time period and care need. Poor self-rated health (SRH) and other health indicators were associated with visits to the doctor. On the other hand, the OR for dental visits was significantly lower (0.736) for women and this difference persisted when controlling for age, education, civil status, time period and dental status. Poor SRH was negatively associated with dental visits. Our results suggest that there are different mechanisms behind the propensity to seek medical care versus dental care and that women may be at a disadvantage in regards to dental care.

GENDER DIFFERENCES IN INAPPROPRIATE DRUG USE: A REGISTER-BASED STUDY OF OVER 600 000 OLDER PEOPLE

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We aimed to investigate whether gender is associated with inappropriate drug use (IDU, e.g., drug-drug interactions, 3+ psychotropic drugs), after adjustment for age, socioeconomic status (i.e. educational level) and co-morbidity (i.e. number of drugs) in a large general population of older people. We analyzed data on gender, age, dispensed drugs, and education from people aged 75-89 years registered in the Swedish Prescribed Drug Register during July-October 2005 (n= 645 429). IDU was more common in women (24.6%) than men (19.3%). Logistic regression analysis also showed that women were more likely to be exposed to IDU than men (OR=1.24; 95% CI 1.23-1.26), after adjustment for age, education and number of drugs. In particular, female gender was highly associated with inappropriate psychotropic use. Our results indicate that IDU should be monitored separately for women and men. Neither socioeconomic status nor co-morbidity could explain the gender differences found in this study.

SESSION 480 (POSTER)

HEALTH PROMOTION AND DISEASE PREVENTION

AGING IN A CONFINED PLACE: THE HEALTHCARE EXPERIENCE OF THE AGING INMATE

L.K. Jennings, *School of Social Work, University of Alabama, Austin, Texas*

It is critical to understand the importance of health in the older prisoner's life. The health of this population not only affects the individual - but the prison system, the family, the institutional caregivers and the larger community. The older inmate population continues to grow, however, changes in the system (funding, resources, support) have not kept pace at the same level. Over one half of these prisoners report their health as poor, and there is a prevalence of chronic health concerns: hypertension, diabetes, arthritis, cancer, and heart problems. This study provides a unique opportunity to explore inmate healthcare in a prison that provides care for the aged/infirm. Method: Qualitative data were collected via semi-structured, in-depth interviews with four older male prisoners (50 and up), and 12 collateral participants. Individual cases were

designed around each inmate's healthcare story. Prominent themes were derived using a constant comparative approach. Key themes included: healthcare challenges; the healthcare process; family; health communication; policy issues; and community involvement. Conclusions and Implications: Interviews reveal critical healthcare issues faced by older inmates. Some participants ignored health problems until they became health crises. The healthcare process routinely involved much time standing in line waiting for care. Similarly, healthcare providers face challenges in providing quality care in a heavily monitored, secure environment. Can appropriate care for chronic medical conditions be provided within the limits of a prison budget? On a larger level, policy issues need to be addressed at the state level to provide avenues for change in prison healthcare.

KNOWLEDGE AND ATTITUDES ABOUT AGING AMONG HEALTHCARE PROFESSIONALS IN EMERGENCY MEDICINE: IMPORTANT DISTINCTIONS

C.E. Boozer, A.P. Glass, *Institute of Gerontology, University of Georgia, Athens, Georgia*

The rapid aging of our population, coupled with the fact that the majority of older adults have one or more chronic diseases, makes it essential for our healthcare system to gear up to be better prepared to treat their older patients. Research suggests that most nurses who graduated as recently as five to 10 years ago received little or no education relating to gerontological nursing (Berman et al., 2005). Our study sought to examine the knowledge and attitudes that various staff members of the Emergency Department in one mid-sized hospital hold pertaining to aging and older patients. Data were collected by utilization of a survey administered through required staff meetings. The sample ($n = 37$, 35.2%) voluntarily completed the survey, which consisted of questions pertaining to older patients (70+) and the staff members' perceptions and attitudes regarding these patients. An adapted version of the "Facts on Aging Quiz" by Breyspraak, Kendall, and Halpert (n.d.) was administered to the staff as well. Data analyses indicated the mean score on the quiz was 65.9%. No significant trends were found when analyzing the scores by respondents' age, sex, length in the field, position held, or education. However, when comparing responses to health-related questions versus general aging questions, the results revealed an interesting distinction. On the questions that focused more towards health, the mean score was 68.4%, versus 51.5% on the more general aging questions was. These results indicate a need for more training and education of the hospital staff.

AN EVALUATION OF AN ACTIVITY PROJECT FOR COMMUNITY DWELLING OLDER ADULTS

Y. Nishimura, *Health and Social Services, Hiroshima International University, Higashi-Hiroshima, Japan*

Objectives: To demonstrate that activity and social participation by older adults dwelling in the community will influence their independent living. A community care center in Ube, Japan in cooperation with the residents' association leaders and the district welfare commission provided for the elderly residents a program with physical exercise and a lunch program for over three years. **Methods:** The activity program consisted of physical exercises and lunch held monthly from 2004 to 2006 (3 years) hosted 44 participants with an average age 78 years old; 29 (65.9%) participated in both programs. **Tools:** Self Efficacy for Health Promotion Scale (Yokokawa, 2001); IADL (Instrumental Activity of Daily Living); LSNS (Lubben Social Network Scale) and MMS (Mini-Mental State Examination); Demographic Questionnaire. **Results:** (1) The average self-efficacy scores: 1 year (23.4 ± 5.8 , $n = 10$), 2 years (28.2 ± 4.1 , $n = 6$), and 3 years (32.9 ± 9.2 , $n = 13$). The 3 year group demonstrated a significant score ($p < .05$). Duration of participation increased interests in health promotion, but no significant relationship to IADL, LSNS and MMSE. (2) Self-efficacy ($n = 44$) significantly related to demographic factors of age, household, IADL, LSNS ($p <$

.01) perceived health and education ($p < .05$). (3) IADL significantly related to LSNS ($p < .01$). (4) Concerning inactive status ($n = 44$), activity and social participation were raised significantly during the participation from 2004 to 2006 ($p < .05$), but physical function showed no relationship. **Conclusion:** Activity program and lunch increased motivation for health promotion and social participation, but did not improve physical function.

THE INFLUENCE OF PSYCHOSOCIAL FACTORS ON MEDICATION MANAGEMENT AND ADHERENCE IN VISUAL IMPAIRMENT

L.P. Nadel, K.V. Echt, W.R. De l'Aune, M.D. Williams, C.L. Jasien, T. Munir, S. Lynch, *Atlanta VA Rehabilitation Research & Development Center, Atlanta, Georgia*

Medication non-adherence is a risk factor for patient morbidity and mortality, particularly in aging. Psychosocial factors are known determinants of medication-taking behaviors. The role of psychosocial factors in visually impaired persons' medication management and adherence, however, is not well-understood. Participants included 25 visually impaired (corrected acuity of 20/60 or worse) and 25 non-visually impaired (corrected acuity of 20/40 or better) veterans age 34 to 94 years ($M=64$, $SD=14$). Psychosocial measures included social support (MOS), patient activation (PAM-13), medication taking self-efficacy, and medication management assistance. Measures of medication management and adherence included the Hopkins Medication Schedule (HMS), Drug Regimen Unassisted Grading Scale (DRUGS), self-reported adherence (Morisky), and an index of refill-adherence (Cumulative Medication Gap; CMG). Participants in both groups demonstrated similar patient activation, medication taking self-efficacy and social support scores and these were associated with aspects of medication management and adherence ($r's > .29$). Findings specific to the medication management assistance items suggest that the odds of reporting medication management assistance is 5 times greater for the visually impaired participants than the non-visually impaired participants ($OR=5.09$, $CI\ 95\% 1.28, 20.28$). Furthermore, visually impaired participants receiving caregiver support demonstrated less capacity to perform the medication management tasks (DRUGS, HMS) compared to the non-visually impaired participants. These findings suggest that psychosocial factors may be differentially influential on aspects of medication management and adherence and may provide important targets for intervention approaches.

THE EFFECTS OF JOB CREATION PROJECTS FOR THE ELDERLY ON HEALTH PROMOTION: THE CASE OF KOREA

J. Lim, E. Shin, *Food and Resource Economics, Korea University, Seoul, Korea, South*

Job creation project for the elderly has been supported by Korean government since 2004 to promote employment of the old so as to prepare for the aging society in Korea. Besides providing economic stability through suitable jobs, this project is expected to produce positive side-effects in which the elderly can boost their self-esteem and have better access to various resources for health. This paper aims to empirically examine the effects of reduced medical costs and changes in health promotion behaviors for the participants of the project. Estimating these effects can be exposed to selection bias of "Healthy Worker Effect (HWE)" which states that healthier workers are more likely to be employed. Thus, in order to exclude the probability of overestimation, this paper adopted cohort sequential design to effectively control problems caused by participating time gap as well as maturation effect and spurious causal effect which are also associated with time problems. Concerning the effects of medical cost reduction, the participated old tend to pay less amount of money, specifically \$194 less than the non-participants annually. The reduced costs amount to \$30,412,375 for 2.5 years from 2004 to the first half of 2006, which account for 16.2% of the total budget (\$188,453,608). As to health promotion behaviors, the elderly improve health-related behaviors in area of smoking, alcohol

consumption, exercises, weight management, and ordinary activities after participation in the project. Therefore, the empirical results indicate that job creation project plays an important role in enhancing health status of the elderly.

DOING THE CONDOM DANCE: INTRODUCING SEXUAL SCRIPTING INTO OLDER ADULTS' SAFE SEX EDUCATION PROGRAMS

P.P. Brown, H. Ewen, *Sociology and Gerontology, Miami University, Oxford, Ohio*

Sexual scripting is based on learned gendered norms and dictates what role men and women are to play during sexual behaviors. These scripts are based on an accumulation of cultural and societal expectations, including the historical and structural changes during their cohort aging process. In a recent World Health Organization bulletin, researchers noted current studies indicated that older adults do not practice safe sex as often as younger adults. The use of condoms in the over-fifty age groups is around 15%, and with a marked increase of HIV/AIDS in the older ages, sexual education is imperative to prevent high-risk behaviors. Previous research shows that condom use increases with the inclusion in sexual scripts. The use of condoms for "safe sex" requires that both partners be participants in the prevention and condoms must be included in both of their sexual scripts. This paper reviews the role that sexual scripting plays in gender construction and outlines current research that includes sexual scripting. "Safe sex" programs, literature and videos available in the United States are reviewed and analyzed for sexual scripting content. A discussion also supports the inclusion of sexual scripting into "safe sex for seniors" education programs in the United States, including practical suggestions for sex educators.

MOTIVATORS AND THE LEVEL OF SELF-READINESS FOR LEISURE TIME PHYSICAL ACTIVITY AMONG SEDENTARY OLDER KOREAN AMERICANS

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Although physical inactivity is one of the most prevalent risky health behaviors in older Korean Americans, little is known about their motivators to the initiation and maintenance of leisure time physical activity (LTPA). This study is aimed at exploring perceived psychosocial and environmental motivators and the levels of self-readiness for LTPA among sedentary older Korean Americans residing metropolitan Phoenix area. Narrative information was collected from 60 older Korean Americans through an open-ended format interviews to identify perceived motivators to physical activity maintenance. Self-readiness for LTPA was measured using Index of Self-Readiness. The data will be analyzed using content analysis and descriptive statistics; data will be coded and categorized to identify themes. A social ecological perspective will be used for secondary coding and categorization. The association between sedentary behaviors and general characteristics (i.e. education, gender, marital status) will also be tested using χ^2 analysis. Results are currently under exploration. The open-ended format is expected to provide rich narrative data regarding barriers to the maintenance of physical activity. The acknowledgment of motivators, particularly from a social ecologic perspective, will guide culturally-relevant community-based interventions for promoting LTPA among sedentary older Korean Americans, a consistently growing ethnic subgroup.

WHY DO OLDER ADULTS USE COMPLEMENTARY AND ALTERNATIVE MEDICINE? RESULTS OF A NATIONAL SURVEY

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Half of U.S. adults ages 50+ use complementary and alternative medicine (CAM). Little is known about reasons for CAM use, which we examined with data from the 2007 National Health Interview Survey

and its CAM supplement (n=10,104). Analyses, including chi-square and logistic regression, accounted for the survey design and were weighted for national representativeness. Controls included age, education, marital status, health insurance, comorbidities, body mass index, and region. Among adults 50+, 75% used CAM for general wellness/disease prevention; 36% following health provider recommendations; 31% for immune function; 29% following family/friend recommendations; 11% for memory. Nearly 8% used CAM because medical treatments failed, 6% because they were too expensive. More women than men used CAM because it was recommended by a provider (41%, 29%, $p<.0001$), or to enhance energy (16%, 11%) (both $p<.0001$). African Americans were less likely than whites to use CAM because it was recommended by a provider (29%, 38%), or because medical treatments failed (4%, 8%) (both $p<.0001$). Asians most often used CAM for general wellness and immune function, Hispanics for general wellness and following provider recommendations. Age was not a factor. In adjusted results, African Americans and Hispanics were less likely than non-Hispanic whites to report using CAM following health provider recommendations (respectively, odds ratio 0.63, 95% confidence interval 0.54-0.75; 0.72, 0.57-0.91). A notable number of older adults use CAM because medical treatments do not help or are too expensive. Many CAM users, particularly women and non-Hispanic whites, say they use CAM following health provider recommendations.

PREVALENCE OF HIV TESTING AMONG MIDDLE AND OLDER-AGED ADULT FLORIDIANS

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Objective: Testing is important for the prevention of the spread of the Human Immunodeficiency virus among middle and older adults. The aim of this study was to identify the prevalence of HIV testing among adults 45-64 years of age in Florida, and to determine the difference in the incidence of testing between 2002 and 2007. Methods: Secondary data analysis conducted of the Florida Behavioral Risk Factor Surveillance System (BRFSS) survey utilizing the Community Health Assessment Resource Tool (CHART). The BRFSS assesses personal health behaviors contributing to morbidity and mortality. Analysis examined the State-wide prevalence of HIV testing of adults between the ages of 45-64 at two points in time; 2002 and 2007. Results: Year 2007 prevalence of HIV testing was 35.9 (95% CI: 34.2-37.7) for adults ages 45-64 compared to HIV testing in 2002; 33.2 (95% CI: 31.2-35.4). Results revealed a 2.7% increase. A decrease occurred in the number of adults ages 45-64 who had tested in the past 12 months for data comparing prevalence in year 2002, 12.6 (95% CI: 11.1-14.3) with testing results in 2007; 10.8 (95% CI: 9.6-12.1). Conclusion: A need exists for ongoing age, gender, and ethnic/racial group appropriate, health education and health promotion efforts to increase HIV testing and promote disease prevention among middle and older aged adults; a population that may perceive itself at low-risk for HIV infection.

THE IMPACT OF THE WII ON SELF-RATED HEALTH, COGNITION AND DEPRESSION IN THE ELDERLY

E. Ayers, *The College of Wooster, Hillsborough, New Jersey*

Increasing activity levels in older adults has a positive impact on depression, cognitive functioning, and self-rated health. This study tested whether playing a competitive, physically active video game called Wii would improve mental and physical health in nursing home and assisted living patients. Seventeen elderly residents of a nursing home and an assisted living facility were tested with a Stroop Test and Letter Digit Substitution Task to indicate cognitive functioning, a Self-rated Health Test for overall perceived health, and the Geriatric Depression Scale for depression. They were assigned to either a Wii program or control group. The Wii group played for a few hours a week for a month and completed the tests, and the control group just completed the tests. Fol-

lowing the month intervention the same tests were given again, but no before-after or intervention-control comparisons were found to be significantly different. However, all results showed positive trends, indicating that the Wii decreased reaction time, improved self-rated health, and lowered depression scores. The Wii appears to be a positive addition to nursing homes and assisted living facilities based on current results.

THE ASSOCIATIONS AMONG MIDDLE-AGED AND OLDER ADULTS' BODY MASS INDEX, PERCEPTIONS OF GENERAL HEALTH STATUS, AND PARTICIPATION IN HEALTH PROMOTING BEHAVIORS

S. Stahl, J. Patrick, *West Virginia University, Morgantown, West Virginia*

Despite public health efforts to promote engagement in health promoting behaviors (e.g., physical activity), a majority of middle-aged and older adults remain sedentary (Prohaska, 2006). Moreover, more than one third of U.S. adults are obese ($BMI > 30$), which is considered a major risk factor for many chronic illnesses. Recent research has indicated that engagement in health promotion may be associated with individuals' health status (Zanjani, Schaie, & Willis, 2006). Therefore, we examined the associations among body mass index (BMI), chronic health condition severity, future time perspective, perceptions of general health status, and participation in health promoting behaviors. Participants were 124 (male = 38; female = 86) middle-aged and older adults (mean age = 53.17; mean BMI = 27.87) who supplied self-report data. We proposed that BMI and perceived limitations due to chronic health conditions would relate to adults' future time perspective and perceptions of their general health status. Moreover, we hypothesized that adults' future time perspective and perceptions of their general health status would relate to engagement in health promoting behaviors. Results of a path analysis suggest that BMI, perceived limitations due to chronic health conditions, and future time perspective were related to adults' perceptions of the general health status. Furthermore, general health status was related to engagement in health promotion. Model fit indices also suggest a good fit between the data and the tested model. Results are discussed within a lifespan perspective and focus on ways to better inform health promotion programs in mid- to late life.

GOAL FRAMING OF HEALTH RELATED BEHAVIORS: WHAT FACTORS CONTRIBUTE TO THE PERSUASIVENESS OF A MESSAGE?

S. Stoner, *West Virginia University, Morgantown, West Virginia*

A person's decision to engage in healthy behaviors should ideally be based on facts supporting that decision. However, there is evidence that how relevant information is framed (positive: describing benefits gained from engaging in behaviors; negative: describing benefits lost from not engaging in behaviors) can influence decisions. The effect of information frame on older adults' compliance with health behavior recommendations is unclear due to a paucity of research. In an attempt to understand factors that influence older adult healthy behavior decision making, the current study examined variables that might predict whether positively or negatively framed information elicits greater compliance with health recommendations. Positively and negatively framed messages promoting skin cancer prevention and detection were distributed to older ($N=68$, mean age=75.95; $SD=8.08$) and younger adults ($N=68$; mean age=19.93; $SD=2.42$). Participants rated their intentions to engage in prevention and detection behaviors. Intentions to engage in prevention behaviors were stronger among older adults ($M=4.5$, $SD=1.13$) than younger adults ($M=2.85$, $SD=1.18$; $F(1,132)=66.02$, $p<0.001$). There was not a significant difference across age groups in intentions to engage in detection behaviors. Among participants exposed to the positive frame, history of engaging in prevention behaviors was related to intentions to engage in future prevention behaviors ($R^2=.67$, $F(1,60)=119.3$, $p<0.01$, $\beta=.82$, $t=10.92$, $p<0.01$). A weaker, though significant, relation between history of prevention behaviors and intentions to engage in future pre-

vention behaviors was found in the negative frame ($R^2=.50$, $F(1,58)=58.74$, $p<0.01$, $\beta=.71$, $t=7.66$, $p<0.01$). The implications of these results for developing effective health-promoting messages are discussed in further detail.

FATIGUE AND PHYSICAL FUNCTIONING AMONG OCTOGENARIANS AND CENTENARIANS: FINDINGS FROM THE GEORGIA CENTENARIAN STUDY

J. Cho¹, P. Martin¹, M. MacDonald¹, J. Margrett¹, L. Poon², 1. *Iowa State University, Ames, Iowa*, 2. *University of Georgia, Athens, Georgia*

This study examined the relationship between physical functioning and fatigue for 321 octogenarians and centenarians of Phase III of the Georgia Centenarian Study. Five subscales of fatigue (i.e., general fatigue, physical fatigue, reduced motivation, reduced activity, and mental fatigue), and two activities of daily living subscales (ADL, physical and instrumental) were used. Preliminary analyses showed that there were significant differences in subscales of fatigue for age, residence, level of self-rated health, and level of cognitive functioning. Participants who were older, lived in nursing home, rated their health as poor, and had lower cognitive functioning felt more fatigued when compared to their counterparts. Two confirmatory factor analyses supported a five-factor model for fatigue and a two-factor model of activity of daily living. Structural equation modeling (SEM) of two latent variables (Fatigue and ADL) using LISREL 8.71 was computed to examine how fatigue influenced physical functioning among octogenarians and centenarians. The model fitted the data quite well, $\chi^2(df=249)=315.46$, $CFI=0.98$, $RMSEA=0.036$. Results showed that general fatigue, physical fatigue, reduced activity, and mental fatigue significantly influenced IADL, whereas physical fatigue, reduced activity, and mental fatigue were significantly associated with PADL. The results suggest that fatigue or tiredness is not just an unpleasant symptom, but a critical factor for functional ability in later life. In conclusion, this study contributes to our understanding of physical and mental fatigue.

FACTORS AFFECTING HEALTH PROMOTING BEHAVIORS OF COMMUNITY-DWELLING ELDERLY WOMEN IN KOREA

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The purpose of this study was to examine a theoretical staged causal model on health promoting behaviors of community-dwelling elderly women in Korea. The model contained three stages including antecedents (Stage 1), interpersonal influence (Stage 2) and outcome behavior (stage 3). The antecedents included perception variables (e.g., perceived health status, self-efficacy, and self-control) and individual characteristics (e.g., age, education, spouse, and religion). Stage 2 focused on social support. In stage 3, the outcome behavior variable was health promoting behavior. A total of 438 community-dwelling elderly women participated. The instruments used in this study were Health Promotion Lifestyle Profile (HPLP), Hardiness Scale (HS), Perceived Health Status Scale (PHSS), Self-Efficacy Scale (SES), and Interpersonal Support Evaluation List (ISEL). Sixty-two percent of the variance in the health promoting behaviors of elderly women was explained by the direct effect of social support ($\beta=.53$), self-efficacy ($\beta=.18$), perceived health status ($\beta=.16$), education ($\beta=.12$), and spouse ($\beta=.10$). Twenty-nine percent of the variance in the social support was explained by the direct effect of self-efficacy ($\beta=.31$), self-control ($\beta=.10$), and perceived health status ($\beta=.16$). The results indicate that self-efficacy, self-control, and perceived health status had an indirect influence on health promoting behavior through social support. The findings of this study suggest that social support is a mediating variable on health promoting behavior of community-dwelling elderly women, and further refinement of the underlying model is warranted.

IDENTIFYING FACTORS TO HELP CREATE HEALTHY SEXUALITY PROGRAMS FOR OLDER MSM

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The sexual behavior, including HIV/STD risk behavior, of midlife/older men who have sex with men (MSM) is relatively unexplored. This study first examines differences between MSM age 50+ ($M = 58.15$; $SD = 7.52$) who reported no vs. at least one sexual partner in the past 12 months. San Francisco participants of the Urban Men's Health Study, a probability-based telephone survey, were recruited to participate ($N = 179$; 29.6% HIV+). Findings suggest differences in several key domains. MSM with no sexual partner identified lower engagement in social activities, less connections with others, and poorer emotional well-being, while conveying higher ageist attitudes ($ps < .05$). MSM without sexual partners also reported poorer physical health and erectile functioning, yet stated fewer concerns regarding their physical and sexual health ($ps < .05$). Secondly, the current study examined high risk behavior among MSM age 50 and older who reported having at least one sexual partner in the last 12 months. The following factors were associated with higher risk behavior: having a main partner, having more recently received HIV test results, an increased use of sexual performance enhancers, higher sense of isolation, and more positive beliefs about barebacking. Increased risk was also associated with poorer life satisfaction ($ps < .05$). Results suggest that providers and researchers interested in creating healthy sexuality programs for midlife and older MSM need to tailor interventions to address key differences (e.g., social engagement, ageism, emotional well-being, and physical/sexual health functioning) between MSM that are vs. are not currently sexually active.

AN EXAMINATION OF CHEMICAL DEPENDENCY SERVICES FOR SENIORS IN NYS

N.S. MacFarland, *SUNY Albany, Albany, New York*

The prevalence of alcoholism among the elderly is of growing concern in New York State and nationally. As the population of seniors continues to expand, the need to develop innovative approaches to prevention and intervention will require increased attention. The literature supports the premise that elder-specific approaches to late-life addictions can be very helpful with this specialized population. In order to gain greater insight into the treatment practices employed by providers of geriatric addictions treatment in New York State, an exploratory-descriptive, quantitative study was conducted utilizing data from the New York State Office of Alcoholism and Substance Abuse Services (OASAS). A survey of 34 programs (65 % response rate), found that treatment approaches and practices for older adults dramatically differed between programs. 69% of the programs surveyed provided heterogeneous services to seniors (meaning mixed-age groups). The emphasis in programs and services targeting seniors inclusive of all programs was on psycho education, psychiatric care, and family services. Of nine community service resources for seniors, senior centers were found to be the most utilized (45%). Of the programs surveyed, 80% acknowledged that the needs of seniors are minimally met or not met at all. Though there seems to be consensus about what works and what is important within the field, there is a lack of research addressing the numerous and varied components of addiction treatment revealed in this study. Going forward, it will be important to evaluate the degree to which services tailored specifically to seniors will foster improved treatment outcomes.

DAILY HEALTH BEHAVIORS AND STRESSOR REACTIVITY AMONG AGING ADULTS: FINDINGS FROM THE NATIONAL STUDY OF DAILY EXPERIENCES (NSDE)

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The present study extends current scientific understanding of the role of health behaviors, such as exercise and diet, on chronic and acute health conditions by examining how older adults' health habits are related to overall well being at the daily level. Specifically, the present study examines the relationship between daily health behaviors, stressor exposure, including arguments and overloads, and emotional and physical reactivity (risk of being in a bad mood, getting a cold). An examination of these daily experiences is critical for a more meaningful portrait of overall health and well-being. Further, by assessing intra-individual variability via hierarchical linear modeling, we are able to better tap into factors contributing to individual coping mechanisms and patterns. The present study utilizes adults aged 25-74 ($N=1031$) from the National Study of Daily Experiences (NSDE), a sub-sample taken from the Midlife in United States (MIDUS) study. Reactivity was estimated by fitting a within-person model that assesses the covariation of daily health behaviors, symptoms, mood and the occurrence of daily stressors. Analyses indicate that health behaviors play a significant role in the interrelationships between age, stressor exposure and reactivity. For example, increased amounts of daily stressors are associated with both physical symptoms and negative mood, but are moderated by sleep behaviors, as well as by age. Implications for increasing coping responses and health education efforts for older adults are discussed.

MEDICATION MANAGEMENT STRATEGIES AND BARRIERS AMONG INDIVIDUALS WITH AND WITHOUT VISUAL IMPAIRMENT

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Effective medication management and adherence is a critical component of patient health maintenance, particularly among older adults. In this study the medication taking barriers and strategies of visually impaired and non-impaired individuals are investigated. Fifty veterans (25 visually impaired, 25 non-visually impaired), age 34 to 94 years old ($M = 64$, $SD = 14$) completed interview-based measures of demographics and medication taking barriers and strategies. Four indicators of medication management and adherence included skill for managing one's own regimen (Drug Regimen Unassisted Grading Scale; DRUGS), a novel regimen (Hopkins Medication Scale; HMS), self-reported adherence (Morisky) and an index of refill-adherence (Cumulative Medication Gap; CMG). Findings revealed that participants in both groups reported similar numbers of barriers to medication taking; however the odds of using three or more strategies for managing medications was six times greater for the visually impaired than the non-visually impaired individuals ($OR=6.0$, $CI 95\% 1.53, 23.51$). Patterns of barriers and supports emerged. For instance, visually impaired participants cited identifying pills, information on the label and consumer information as barriers to medication taking; however, assistive device use to support medication management was low (8% medication label readers, 12% CCTVs, and 32% magnifiers). The number of medication management strategies used was directly related to the DRUGS ($r = .33$) and Morisky ($r = .29$) measures and to age ($r = .29$). Greater knowledge of the barriers and strategies that facilitate effective medication management and adherence among individuals with and without visual impairment can be used to target intervention approaches.

LIFESTYLE UNIVERSITY IMPROVES CHRONIC CONDITIONS FOR OLDER SOUTH CAROLINIANS

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Introduction: South Carolina (SC) is ranked fifth in the nation for rates of diabetes, fifth for obesity, and sixth for hypertension. Heart attack and stroke are the first and third leading causes of death in SC. A multi-faceted, interdisciplinary educational intervention designed for older adults with diabetes, obesity, and hypertension was instituted in urban Richland County and rural Orangeburg, Bamberg, & Calhoun Counties, SC with goal of risk factor reduction. **Methods:** 630 multiple risk factor individuals, mean age 66.63 (83% female, 74% AA) were recruited to intensive 10-week program (Lifestyle University) of didactics, small group sessions, and self-monitoring to better understand contribution of diet, physical activity, stress, social support, and medications on cardiovascular risk factor control. **Results:** Program participants demonstrated decline of 2.8 mm Hg in systolic BP ($p=0.002$) and of 3.12 mm Hg in diastolic BP ($p<0.001$). Weight decreased by 1.25 lbs. ($p<0.001$). Physical activity measures and fruits and vegetables consumption improved post-intervention (both $p<0.001$). Participants' perception of stress and stress coping also improved post-intervention by .73 points ($p=0.040$). Participants' self-rating of their health improved as well ($p<0.001$). **Conclusion:** This study suggests that behavioral change is possible and is associated with improved quality of life, BP reduction, and improved diet and physical activity in both urban and rural settings for older adults. Lifestyle University has proven itself to be a creative and successful approach to healthy aging.

SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT FOR SUBSTANCE MISUSE IN OLDER ADULTS

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Older adults misusing alcohol, medications, or other substances are vastly underserved. This presentation describes the Florida BRITE Project (BRief Intervention and Treatment for Elders), developed to address this issue by screening large numbers of older adults and providing brief interventions for those demonstrating risky use. Funded by a five-year federal grant from SAMHSA's Center for Substance Abuse Treatment under its Screening Brief Intervention and Referral to Treatment (SBIRT) initiative, elders are provided: screening and feedback if screening indicates none to low risk, brief intervention or brief treatment for moderate risk, or referral to treatment program for high risk. Unlike SBIRT grants in other states, the Florida BRITE Project is elder-specific. BRITE health educators conduct screenings at hospitals, medical clinics, health fairs, senior centers, retirement communities, and senior housing. Operating in 22 sites in 15 counties, results showed that 11,483 elders were screened in the first two years. The sample was mostly female (60%), and diverse (26% African American, 18% Hispanic/Latino), with a mean age of 71 years. Most (75%) received screening and feedback only, 19% received brief intervention (motivational interviewing, brief advice), 2% received more intensive counseling (brief treatment), and 2% were referred to substance abuse treatment due to serious problems. The primary problems were alcohol (15.6%) and prescription medications (20.7%) and most of these reported moderate to serious levels of depression. BRITE has substantially increased the number of older adults receiving services and may be sustainable beyond the life of the grant through Medicare, Medicaid and insurance payments.

AGE AND THE SOCIAL STRATIFICATION OF LONG-TERM TRAJECTORIES OF PHYSICAL ACTIVITY

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Objectives. This study assessed age-, race-, gender-, and education-based differences in trajectories of leisure time physical activity. The extent to which these differences persisted after accounting for by changing health status, social relationships, and psychological resources was also examined. **Methods.** A series of multilevel regression models were run using longitudinal data from the Americans' Changing Lives study, a national sample of over 3,000 adults, aged 25-96 at baseline, who were followed for up to 16 years. A physical activity scale was constructed to reflect how often respondents participated in activities such as gardening, exercise, and walking. **Results.** On average, rates of physical activity increased within younger adults, and decreased within middle aged and older adults, throughout the study period. Age differences in the trajectories of physical activity persisted after accounting for time-varying health, social relationships, and psychosocial resources. Also, while whites reported higher levels of activity than blacks, race differences in activity converged over time, particularly during middle and later life. Regarding gender, men reported more activity than women, and these gender differences widened over time during later life. Gender-based differences did not remain after accounting for differences in health, as well as social and psychological resources; however, race differences in the trajectories of physical activity persisted. **Discussion.** While declines in leisure time physical activity during later life were largely accounted for by aging-related changes in health, substantial race-based differences in the trajectories of physical activity during later life remained unaccounted for, perhaps indicating the influence of cultural forces.

PERSONALITY AND PHYSICAL HEALTH AMONG CENTENARIANS: FINDINGS FROM THE GEORGIA CENTENARIAN STUDY

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The purpose of this study was to analyze the role that personality- (Neuroticism, Extraversion, Hostility, Vulnerability, Trust, Competence, and Ideas) played in participants of the Georgia Centenarian Study. These variables were analyzed to determine whether they predicted critical physical health outcome areas such as number of hospitalizations, number of current health problems, current number of diseases, and lifetime diseases. Analyses indicated that Neuroticism was a significant predictor of current diseases, $\beta = .240$, $p < .05$. In essence, the higher the level of Neuroticism, the larger the number of current diseases. Results also indicated a statistical trend regarding Neuroticism and current health problems, $\beta = .199$, $p = .069$. The higher the level of Neuroticism, the larger the number of current health problems. In addition, Trust significantly predicted the number of current diseases, $\beta = -.322$, $p < .05$. The lower the level of trust, the higher the number current diseases. These results not only add to our understanding of the link between personality and physical health, but also provide further insight into how the relationship between these two variables affects centenarians. Future research needs to address the role of coping as a mediating variable between personality and physical health.

USING FOOD TO COPE WITH STRESS PREDICTS WEIGHT-RELATED HEALTH PROBLEMS

M.E. Ward, D. Almeida, Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania

Overweight and obesity contribute to a number of major health care concerns as people age, such as hypertension, diabetes, stroke,

osteoarthritis, respiratory problems and cancer (National Institutes of Health, 1998). Obesity is the result of a long term energy imbalance in which an individual consumes more calories than they burn. Genetics, increased availability of fast and packaged foods and decreased physical activity are the main causes of obesity (National Institutes of Health, 1998). Another potential source of obesity is how individuals cope with stressors. Problem focused and emotion focused coping have been linked to poor physical health (Aldwin & Park, 2004; Folkman, Lazarus, Gruen & DeLongis, 1986). There is a lack of research, however, linking food focused coping to physical health. This study will use 1038 participants from Projects 1 and 4 of MIDUS II to examine how using food to cope is related to weight related health, including BMI, perception of weight, the number of times one has lost 10 or more pounds in the last 10 years, and metabolic functioning. Participants are aged 34-84 ($M = 56$). Controlling for age and gender, regression analyses revealed that using food to cope is associated with higher BMI ($p < .0001$), perceiving your weight as higher than it is (controlling for BMI) ($p < .01$), losing 10 or more pounds in the last 10 years more frequently ($p < .01$), and higher HbA1c (glycosylated hemoglobin) ($p < .01$). Implications of coping for health during adulthood, including obesity, will be discussed.

TRAJECTORY CLASSES OF BODY MASS INDEX IN A REPRESENTATIVE ELDERLY COMMUNITY SAMPLE

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Little information is available on trajectories of body mass index (BMI: weight (kgs)/height (m)²) in the elderly, although high BMI has been associated with chronic disease in younger persons. (BMI is typically categorized as underweight [<18.5], normal weight [$18.5-25$], overweight [$25-30$], obese [$30+$]). Data came from the 10-year (1986-1996) longitudinal Duke Established Populations for Epidemiologic Studies of the Elderly (D-EPESE). D-EPESE is a race-stratified random sample ($N=4,162$; 54% Black, 65% female, median education 8th grade), of persons age 65 and over in five counties (one urban, four rural) in the Piedmont area of North Carolina. In-person information was gathered at baseline, three, six and ten years later on a broad range of health and social characteristics, including self-reported weight and height. We modeled trajectory classes of BMI over 4 waves using latent class models (growth mixture models — GMM) using the statistical software M-plus. The analysis yielded 3 classes of trajectories of BMI: overweight, stable over 10 years, mean baseline BMI ~ 35 (7.7%); overweight, decreasing, mean baseline BMI ~ 35 (2.4%); and normal weight, stable over 10 years, mean baseline BMI ~ 25 (89.9%). These findings suggest 2 distinct classes among those seriously overweight at baseline, with one class at greater risk for health decline over the decade than the other. Further analyses will be carried out to identify the characteristics associated with each latent class, and in particular whether in this sample of older people, overweight is associated with incident disease, and thus decline in weight. P30AG028716, 2P50-MH60451

SESSION 485 (SYMPOSIUM)

PSYCHOLOGICAL ADJUSTMENT, WELL-BEING, AND COGNITIVE FUNCTIONING AMONG THE ELDERLY: THE WISCONSIN LONGITUDINAL STUDY

Chair: R.M. Hauser, Sociology, University of Wisconsin-Madison, Madison, Wisconsin

These five papers bring together several sources of well-being or distress and cognitive functioning among the elderly, drawing in common on a single, rich longitudinal set of data from the Wisconsin Longitudinal Study (WLS). The Wisconsin Longitudinal Study (WLS) is a long-term study of a random sample of 10,317 men and women who graduated from Wisconsin high schools in 1957 and who have been followed for more than half a century. The WLS provides an opportunity to study

the life course, intergenerational transfers and relationships, family functioning, physical and mental health and well-being, and morbidity and mortality from late adolescence through the retirement years. WLS data also cover social background, youthful aspirations, schooling, military service, labor market experiences, family characteristics and events, social participation, psychological characteristics, and retirement. The papers in this session address diverse sources of well-being — income security of widows, pre-retirement work and family trajectories, smoking behavior and cessation, religious involvement, and socioeconomic origins. Thus, they cover a range of social influences, both proximate to and distant from the post-retirement years.

SMOKING, ABSTINENCE, AND COGNITIVE FUNCTION AT AGE 65

D. Kuo, University of Wisconsin-Madison, Madison, Wisconsin

Past findings on the relationships between smoking and cognitive functions in later adulthood were inconsistent. Cognitive function in early life was not controlled in most studies. Socioeconomic status was often measured poorly. Using multivariate regression analysis to analyze cognition data collected in 2004 Wisconsin Longitudinal Study, my early study showed that current smoking status was only modestly associated with cognitive ability at age 65. However, the length of abstinence was positively related to the reasoning ability and letter fluency for all ever smokers. In the current study, I will employ structural equation models to pool all measures of cognitive ability together in order to take into account of measurement error and the latent structure of cognitive ability. The dependent variables measure cognitive functions of verbal comprehension, letter fluency, word recall, and digit ordering at age 65 in 2004. The key explanatory variables include current smoking, ever smoking, and years of smoking or abstinence. Socioeconomic status (education, occupational status, and income), drinking behaviors, major chronic diseases, growing up with smokers, and other demographic characteristics are to be controlled. The cognitive ability in adolescence was measured by the Henmon-Nelson test at freshman and junior years in high school. I attempt to answer the following questions, 1) Are the cognitive abilities significantly different between smokers, non-smokers and former smokers? 2) Do the relationships between smoking behaviors and cognitive ability depend on the dimension of cognitive ability? 3) Does the early intelligence explain the association between smoking and later cognitive ability?

RELIGIOUS INVOLVEMENT AND HEALTHY COGNITIVE AGING - ANALYSIS OF THE WISCONSIN LONGITUDINAL STUDY

K. Tanaka, J. Ho, Sociology, University of Wisconsin-Madison, Madison, Wisconsin

The link between religion and health has been studied by sociologists, epidemiologists, and clinicians, and a great deal of academic work now appears in the gerontology journals. The reason for this current interest includes the role religion continues to play in the lives of many people despite the advance of education and medicine, and the great potential that religion might play in reducing the growing financial costs of health care, and the important criticism towards the overemphasis of impersonal and routinized nature of modern health care over spiritual support. Numerous studies show the positive relationship between socially engaged lifestyles and healthy cognitive aging. However, many questions remain unanswered in understanding the relationship between religious involvement as one form of social engagement and health in later life. Van Ness and Kasl (2003) used a sample of community-dwelling men and women in New Haven and found that frequent church attendance reduced the odds of cognitive dysfunction. Hill et al. (2006) reported that older Mexican Americans who attended church more frequently showed a slower rate of cognitive dysfunction. Since most of what we know about religious involvement and cognitive functioning in later life are limited only to these studies, Hill (2008) emphasized

the importance of further research to test the association between religious involvement and healthy cognitive aging in other regions. To extend the research of church attendance and healthy cognitive function, this study uses the Wisconsin Longitudinal Study to examine whether the association holds among non-Hispanic Whites in Wisconsin.

INCOME SOURCE AND SECURITY AND PSYCHOLOGICAL ADJUSTMENT TO WIDOWHOOD AND DIVORCE IN THE U.S

K. Holden, B. Novak, *Consumer Science, Univ. of Wisconsin-Madison, Madison, Wisconsin*

This paper examines the roll of levels and characteristics of financial assets in predicting levels of psychological wellbeing among widowed and divorced older women. From the Wisconsin Longitudinal Survey (WLS) and the Health and Retirement Survey (HRS) we have a sample of women observed from marriage into widowhood and divorce. There is an extensive literature on the changes in income and assets that occur as marital status changes and another literature on the effect of marital status on psychological wellbeing. Little literature distinguishes the effects of companionship change from changes in economic resources that result from the death of an income recipient. This paper seeks to understand the separate consequences to psychological wellbeing of financial resource loss and marital status change and how financial security may modify the psychological consequences of a spouse's death or separation.

THE IMPACT OF WORK AND FAMILY TRAJECTORIES ON FINANCIAL WELL-BEING AT OLDER AGES

J. Raymo¹, J. Warren², *1. Sociology, University of Wisconsin, Madison, Wisconsin, 2. University of Minnesota, Minneapolis, Minnesota*

Using data from the Wisconsin Longitudinal Study, we examine relationships between trajectories of work and family experiences across the life course and four measures of financial well-being at ages 64-65: (a) total personal income, (b) total household income, (c) health insurance coverage, and (d) household net worth. We construct work and family trajectories using group-based trajectory modeling techniques (finite mixture models) to characterize the trajectories of family circumstances and transitions from birth through age 65 and trajectories of labor force experiences from age 36 through age 65. Preliminary estimates (conducted separately for men and women) indicate that latent work and family trajectories are significantly associated with multiple measures of financial well-being net of more temporally proximate correlates, including work and family circumstances at age 53-54. Trajectories characterized by stable full-time employment and stable marriage across the life course are particularly predictive of more favorable economic circumstances at older ages.

FATHERS' EDUCATION AND OFFSPRING'S PSYCHOLOGICAL WELL-BEING AT MIDLIFE

T. Pudrovska, J.O. Ebot, *Sociology, University of Texas, Austin, Texas*

From a life course perspective, psychological well-being of older adults cannot be fully understood without considering early-life factors that may have important implications for mental health decades later. Using data from the Wisconsin Longitudinal Study, we examine whether fathers' educational attainment is associated with offspring's sense of purpose in life at midlife. Our findings reveal that fathers' education is positively related to purpose in life among middle-aged adults. Yet, this effect of fathers' education is completely explained by offspring's own educational attainment. Individuals with well-educated fathers were more likely to obtain higher levels of education than their less advantaged peers. In turn, one's achieved education is strongly and positively associated with purpose in life even decades after the schooling was completed. Thus, our results suggest that higher socioeconomic status in the family of origin may lead directly to higher status attainment and indirectly to better mental health at midlife.

SESSION 490 (SYMPOSIUM)

SAMPLING AND RECRUITMENT ISSUES IN FAMILY CAREGIVING RESEARCH

Chair: G.C. Smith, *Education, Health & Human Services, Kent State University, Kent, Ohio*

Discussant: B.G. Knight, *University of Southern California, Los Angeles, California*

Multiple challenges and barriers exist in recruiting samples of family caregivers and care receivers for applied and basic research studies. This symposium will examine a wide range of sampling issues that investigators have currently encountered in their research, and suggestions for avoiding potential problems and facilitating the recruitment of caregiving families will be offered. Based on his experience with the REACH I and II trials with over 1,800 caregiver-care recipient dyads, Burgio identifies unique barriers and strategies to sampling and recruitment in multi-site, multi-ethnic clinical trials. Special emphasis is placed on the RE-AIM Model for translating theory to practice. McCallum and Stevens note that researchers and clinicians are failing to reach a large percentage of their target populations. In turn, they focus on the cultural, social, and individual characteristics that influence a caregiver's willingness to participate in intervention research. Pruchno, Brill, and Shands compare caregivers recruited by either a listed telephone approach or random digit dialing. They recommend the use of age-targeted listed samples as a cost-effective means for assembling representative samples of rare caregiver populations. Nanna, Smith, Egbert, and Dellman-Jenkins draw upon their randomized clinical trial investigation of an online psychoeducational support program for stroke caregivers, and present evidence on how caregiver recruitment via the Internet may be superior to direct interpersonal approaches. As discussant, Bob Knight will comment on each presentation and discuss key implications for future research and practice with family caregiver populations

USING LISTED TELEPHONE HOUSEHOLDS TO GENERATE REPRESENTATIVE SAMPLES OF RARE OLDER ADULT POPULATIONS

R.A. Pruchno, J. Brill, Y. Shands, *New Jersey Institute for Successful Aging, University of Medicine & Dentistry School of Osteopathic Medicine, Stratford, New Jersey*

Cost effective strategies for identifying representative samples of rare populations are critical for ensuring that results are valid. We examined whether a sample of women aged 50 -64 who both work and provide care to an older person generated using a listed telephone approach would generate findings similar to a sample identified using random digit dialing (RDD) procedures. Respondents identified using these two strategies were similar in terms of age, marital status, education, income, race, employment status, occupation, and supervisory status. There were no differences in caregiver burden and affect, care recipient's capacities, caregiver's role conflicts, and work experiences between the groups. Differences included care recipient's age (RDD younger) and hours of help provided (RDD more). Age-targeted listed samples are suggested as a cost-effective solution to the problem of assembling a sizeable and representative sample of respondents who are members of rare populations.

CAREGIVER RECRUITMENT CHALLENGES: HOW CAN WE HELP THE HELPERS?

E.K. Stevens, T.J. McCallum, *Psychology, Case Western Reserve University, Cleveland, Ohio*

Increasing numbers of aging persons rely on informal caregivers, and many caregivers are requesting additional support and training. However, literature review suggests that many caregivers choose not to participate in available interventions. The large numbers of caregivers who do not respond to either direct intervention referrals or general outreach attempts suggest that we, as researchers and clinicians, are failing to reach a large percentage of our target audience. What are the pri-

mary needs of the caregivers who are not participating in interventions? What are the cultural, social, and individual characteristics that influence a caregiver's help-seeking tendencies or willingness to participate in interventions? Only when professionals understand the barriers to participation can we begin to tailor our interventions to best suit those whom we aim to serve. Key factors for consideration when designing caregiving interventions and potential strategies for maximizing the effects of caregiver recruitment will be discussed.

SAMPLING AND RECRUITING ISSUES IN THE REACH TRIALS AND THE REACH OUT TRANSLATION PROJECT

L.D. Burgio, *University of Michigan, Ann Arbor, Michigan*

In The REACH I And II Trials, Over 1,800 Caregiver-Care Recipient Dyads Were Recruited Across Multiple Sites For Testing Caregiver Interventions. Equal Numbers Of Caucasians, African Americans, And Hispanics Were Entered Into These Projects. A Variety Of Recruitment Strategies Were Used, And Special Sampling Techniques Were Implemented Because Not All Sites Had Access To The Three Racial/Ethnic Groups. The REACH OUT Translation Trial Presented Special Challenges Because All Recruitment Was Done By Community Agency Personnel. Sampling And Recruitment Issues For This Translation Trial Will Be Discussed Within The RE-AIM Model For Translating Theory To Practice. After Attending This Symposium, Participants Will Be Able To Identify Strategies And Barriers To Sampling And Recruitment In Multi-Site, Multi-Ethnic Clinical Trials, And The Unique Issues Presented By Translational Trials.

RECRUITING CAREGIVING FAMILIES INTO ONLINE INTERVENTION STUDIES

K.M. Nanna, G.C. Smith, N. Egbert, M. Dellmann-Jenkins, C.A. Tomko, *Kent State University, Kent, Ohio*

A growing number of family caregiving interventions are being conducted online, however there is little information published on the best way to recruit eligible participants. Our intent was to recruit 36 dyads (male stroke survivor and female caregiver) with elevated depression and anxiety for a clinical trial of an online psychoeducational program. Initially, our strategy was to approach health care providers and organizations directly to assist us in recruiting eligible dyads. A number of barriers slowed this process considerably, and the participant yield was extremely low. We were successful in recruiting our sample, however, through online messages posted through the National Stroke Association and similar organizations (83% of eligible dyads). Advantages of Internet recruiting included: no additional IRB processes, cost-effectiveness, consistency in the recruitment message, and a wider targeted audience. Recommendations for successful recruitment using online methods will be discussed. [Funded by NINR: 5 R21 NR010189-02] * Corresponding author

SESSION 495 (PAPER)

SERVICE NEEDS OF OLDER ADULTS

ASSOCIATIONS BETWEEN CARE PLANNING INTEGRITY AND NURSING HOME RESIDENT OUTCOMES

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Comprehensive, individualized care plans are essential in meeting the needs of elderly residents. However, care planning processes differ in coordination, integration, interdisciplinary team, restorative perspective and quality (care planning integrity). Using Wan's paradigm for the analysis of healthcare systems as the conceptual framework, we have explored the associations between the characteristics of care planning integrity and resident physical and behavioral outcomes (weight loss, pressure ulcers, urinary tract infections, behavior that affects oth-

ers, and depression without anti-depressants). An ex post facto correlational design guided the study. Minimum Data Set (MDS) coordinators and care planning staff from 96 randomly selected nursing homes in two Midwestern states provided primary data about care planning integrity subconstructs via structured telephone interviews. Resident outcome and quality variables were obtained from MDS and OSCAR databases, respectively. Resident outcomes represented incidence or prevalence estimates using the Center for Health Services Research & Analysis formulas. Quality of the care planning process incorporated deficiency citations for 9 F-Tag regulations related to resident assessment and care planning. Structural equation modeling procedures were used to evaluate the fit of the hypothesized model to the data. Revising the proposed model using theoretical and empirical evidence resulted in a model with acceptable fit to the data (CFI = 0.92; RMSEA = 0.04, RMSEA 90% CI = 0.01-0.06). Direct relationships were demonstrated between care planning integrity and resident behavioral outcomes (behavior that affects others and depression without anti-depressants). Findings can inform the development of interventions to improve resident outcomes through the care planning process.

MENTAL HEALTH TRAINING NEEDS WITHIN ASSISTED LIVING FACILITIES: FINAL RESULTS OF A NEEDS ASSESSMENT

E.K. Dakin, L.M. Quijano, *School of Social Work, Colorado State University, Fort Collins, Colorado*

In addition to already high rates of depression, a Medicaid Mental Illness waiver in Colorado has led to a rising number of persons with mental illness as a primary diagnosis residing within assisted living facilities (ALFs). Reflective of changes such as Medicaid waivers providing for non-nursing home placements, it is believed that ALFs will increasingly be serving a resident population contending with complex mental health diagnoses such as depression, dementia complications, various anxiety disorders, and schizophrenia (Bartels, 2001). The growing level of mental health concerns and the co-housing of frail elders and persons with severe mental illness creates many challenges for assisted living staff. A needs assessment was completed to examine the education and training history and perceptions of mental health training needs among ALF administrators and direct care staff in Larimer County, CO. Results indicated that administrators largely lack the educational and professional backgrounds to adequately support staff in the growing mental health needs within ALFs, and that direct care staff possess limited educational attainment and training related to mental health issues. Despite low levels of formal education and training related to mental health, administrators and direct care staff reported an interest in mental health training for direct care staff. It also appears that administrators greatly underestimate the prevalence of mental illness within ALFs, providing further evidence of the value of such training. Therefore, the needs assessment supported the desire and need for targeted mental health training for direct care ALF staff, the next step for this project.

SURVEY OF ASSESSMENTS USED BY DRIVER REHABILITATION SPECIALISTS FOR OLDER ADULTS

A.E. Dickerson, *Occupational Therapy, East Carolina University, Greenville, North Carolina*

Over 600 surveys listing all available and known visual, perceptual, physical, and cognitive assessments used to evaluate and/screen for driving abilities were mailed to two national databases of driver rehabilitation specialists. The survey asked for respondents to indicate which assessment are used for general categories of client groups (i.e., neurological, orthopedic, older, etc.). Respondents also were asked to describe their reasoning process for decision making as well as which assessments they consider most valuable. Descriptive statistics is used to describe the frequencies of assessment use with older adults as well as specified individuals with disabilities common to older adults. Qual-

itative analysis is used to explain the clinical reasoning process of the recommendations by the driver rehabilitation specialists. Finally, demographics analysis will also yield what differences between the specialists who have different credentials (occupational therapist versus driving instructor) as well as the different types of driving evaluation programs (hospital based versus community based).

TRAVEL MODES USED BY SOUTH FLORIDA ELDERS

D.P. McCarthy, 1. *Occupational Therapy, Florida International University, Miami, Florida*, 2. *South Florida Community Mobility Research Lab, Lehman Center for Transportation Research, Miami, Florida*

Background: Young and old alike, we are dependent on transportation for accessing needed and desired goods and services, including medical and health related travel, socialization, and participation in leisure and recreational activities. As a nation, we are dependent upon the automobile as our primary mode of transportation. How elders transition from driver to passenger is an area of concern for clinicians, planners, and policy makers. Study Objective: The purpose of this study was to gather preliminary information about the driving habits and transportation alternatives knowledge and use by South Florida elders. Method: Participants aged 65 and over were recruited throughout the Miami-Dade community. Surveys were conducted to obtain information about driving status, destinations, and use of public transportation and walking as a form of transportation. Results: Eighty-one participants completed the survey. The presence of medical conditions affected the travel patterns of over 40% of the sample. Driving was the preferred method of travel and public transportation was used by 19.8%. Family and friends provided a significant number of rides, indicating a need for social supports. Food shopping, socialization, medical visits, and leisure activities were the most frequently cited destinations. Conclusion: Transportation is essential for participation in favored activities and role fulfillment. Clinicians have an obligation to address their clients' driving and transportation issues and provide referrals, interventions, and/or their involvement in the development, modification, and coordination of transportation services.

MENTAL HEALTH CONCERNS WITHIN ASSISTED LIVING FACILITIES: FINAL RESULTS OF A NEEDS ASSESSMENT

L.M. Quijano, E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

In addition to already high rates of depression, a Medicaid Mental Illness waiver in Colorado has led to a rising number of persons with mental illness as a primary diagnosis residing within assisted living facilities (ALFs). It is believed that ALFs will increasingly be serving a resident population contending with complex mental health diagnoses such as depression, dementia complications, various anxiety disorders, and schizophrenia (Bartels, 2001). A community needs assessment project was completed to examine administrator and staff perceptions of the nature and extent of mental health concerns within ALFs in Larimer County, CO. Overall, administrators indicated that fewer than 5% of their residents experienced mental illness, and this is inclusive of facilities in which 100% of residents have mental illness as a primary diagnosis (Quijano & Dakin, 2008). Based on prevalence data concerning rates of depression within ALFs, it is likely that this report is a drastic under-representation of true rates of mental illness within Larimer County assisted living facilities; for example, estimates of depression rates among assisted living facility residents range from 13% to 24% (Chapin & Dobbs, 2004; Watson & Lyketsos, 2006; Watson & Zimmerman, 2003). The three mental health concerns or challenging behaviors most frequently identified by direct care staff were argumentativeness (49%), angry or violent behavior (47%), and memory loss (45%), whereas the three most frequently identified by administrators were manipulative behaviors (62%), argumentativeness (57%), and agita-

tion (52%). Implications for future research and community education will be discussed.

SESSION 500 (SYMPOSIUM)

THE INFLUENCE OF NURSING HOME TOP MANAGEMENT ON FACILITY EFFECTIVENESS

Chair: N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Recent research has begun to demonstrate that top managers in nursing homes have an enormous influence on the effectiveness of their organizations. Past research, for example, has demonstrated that top management turnover is associated with poor quality of care and with high caregiver turnover. The top managers most often examined are nursing home administrators (NHA) and Directors of Nursing (DON). Further understanding the relationship between characteristics of top management and organizational effectiveness may be important because it represents a potential means of improving the care and operations of nursing homes. In this symposium, we further examine the relationship between nursing home top management characteristics and various outcomes. This includes examining: 1. job tenure of top managers and resident outcomes; 2. leadership characteristics of top managers and quality; 3. how top management turnover influences the performance of nursing homes; and, 4. the influence top managers have on resident safety culture.

TOP MANAGEMENT LEADERSHIP CHARACTERISTICS AND QUALITY

N. Castle, *University of Pittsburgh, Pittsburgh, Pennsylvania*

The association between leadership strategies of Nursing Home Administrators (NHAs) and Directors of Nursing (DON) on quality of care is examined. The Bonoma-Slevin leadership model is used, that defines leaders as Consensus Managers, Consultative Autocrats, Shareholder Managers, or Autocrats. Leadership information came from primary data collected from more than 2,000 top managers. This data was linked to Nursing Home Compare Quality Measures, OSCAR and ARF data. The multivariate results show that leadership style was associated with several Quality Measures. Moreover, an interaction influence existed, whereby similar leadership strategies for both NHA and DON were most beneficial. This analysis shows the importance of leadership on quality in nursing homes. Moreover, unlike many organizational or environmental conditions, leadership strategies are amenable to change.

JOB TENURE OF NURSING HOME TOP MANAGEMENT, PRESSURE SORES, PAIN MANAGEMENT, AND RESTRAINT USE

F.H. Decker¹, N. Castle², 1. *National Center for Health Statistics, Hyattsville, Maryland*, 2. *University of Pittsburgh, Pittsburgh, Pennsylvania*

We investigated the association between quality of care and the job tenure of nursing home administrators (NHAs) and directors of nursing (DONs). Data sources were the 2004 National Nursing Home Survey and quality measures from resident assessment data. Our study focused on NHAs and DONs with one year or more tenure. Dependent variables were pressure sores, pain management, and restraint use. Each regression model included a one-year lagged variable of the dependent variable as well as other relevant control variables (including staffing, facility, and resident characteristics). Among NHAs (n=787), increasing tenure was associated with a decrease in residents experiencing pain (p=.014) and marginally decreased pressure sores (p=.060). Among DONs (n = 703), increasing tenure was associated with a decrease in pressure sores (p=.008) and pain (p=.025) and marginally decreased restraint use (p=.057). Increasing job stability among NHAs and DONs is important, and may be associated with better quality outcomes.

RESIDENT SAFETY CULTURE IN NURSING HOMES: ASSESSMENT OF DIRECTORS OF NURSING

N. Castle, J. Ferguson, *University of Pittsburgh, Pittsburgh, Pennsylvania*

In this research, we examine the responses of more than 2,000 Directors of Nursing (DON) to a newly developed nursing home specific survey instrument to assess patient safety culture (PSC) in nursing homes. The Nursing Home Survey on Patient Safety Culture (NHSPSC) was used to assess PSC. The DON response rate to this survey was 62%. The aggregate NHSPSC scores for the 12 domains show that most DON report a poor PSC in their facilities. Organizational characteristics, such as staffing levels and occupancy were associated with PSC scores. Characteristics of DONs were also associated with PSC scores, such as tenure and training. Although not causal, some of these characteristics may represent an opportunity to influence PSC. Moreover, influencing PSC may be important as the PSC scores were also associated with several quality indicators. PSC may have a significant impact on quality of care and quality of life for residents.

TOP MANAGEMENT TURNOVER AND QUALITY IN NURSING HOMES

M.K. Lin, N. Castle, *Health Policy and Management, University of Pittsburgh, Pittsburgh, Pennsylvania*

To examine the relationship between top management (i.e., Nursing Home Administrator [NHA] and Director of Nursing [DON]) turnover and quality of care in nursing homes, we collected 2003 staffing data from 2,840 facilities and linked them to fourteen Nursing Home Compare quality measures. We developed structural equation models to assess the direct and indirect relationships among turnover, the number of staff, the types of staff, and the quality measures. Our results indicate top management turnover systematically affects quality through nurse staffing levels and the use of agency staff. Across all 14 quality measures, an increase in DON turnover is associated with a decrease in registered nurse (RN) staffing levels and an increase in the use of nurse aide (NA) agency staff, while an increase in NHA turnover is associated with an increase in both RN staffing levels and NA agency staff. Across all quality measures, the use of NA agency staff is associated with an increase in quality of care concerns. Similarly, increased nurse staffing levels are associated with a decrease in the use of NA agency staff. For several quality measures higher NHA turnover is associated with poorer quality. In contrast, higher DON turnover is associated with better quality for several quality measures.

SESSION 505 (SYMPOSIUM)

THE SEATTLE LONGITUDINAL STUDY: UNIQUE OPPORTUNITIES FOR DEVELOPMENTAL INQUIRY

Chair: D. Gerstorf, *Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Discussant: K. Schaie, *Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

The Seattle Longitudinal Study (SLS) is one of the longest ongoing studies in the social and behavioral sciences. The study has revealed key insights into a large variety of developmental phenomena and contributed tremendously to our understanding of the structure, sequencing, and mechanisms underlying developmental change. The major objective of this symposium is to highlight how the many unique features of the study continue to provide a highly important source for contemporary and future inquiry. N. Ram provides an overview of the study's design, highlighting some of the unique strengths of the study that have and shall provide for unique opportunities for developmental research. D. Gerstorf draws from the cohort feature of the study and moves the typical study of cohort differences from cognitive aging to

aging in other domains (well-being, personality) and to examining cohort differences in the experience of dying. C. Hoppman illustrates use of the dyadic aspects of the study and reports considerable spousal similarities in well-being both for level and 35-year change. M. Martin utilizes the multi-occasion feature of the study and demonstrates similarities and differences in within-person and between-person structures of cognitive development across adulthood. The discussion by Warner Schaie will integrate the four empirical papers and discuss various types of research with the SLS that promise further understanding of lifespan development.

THE SEATTLE LONGITUDINAL STUDY: CLASSIC, EFFICIENT DESIGN – ELEGANTLY HIP AND GETTING BETTER WITH AGE

N. Ram, D. Gerstorf, *Pennsylvania State University, University Park, Pennsylvania*

The SLS began in 1956 as a cross-sectional study examining differential patterns of intellectual functioning across age. Inspired by the longitudinal studies of early life, a second wave was conducted – for replication and to obtain the benefits of short-term longitudinal data. The classic, efficient, cohort-sequential design emerged as a theoretical model to explain discrepant results. As the short-term longitudinal study grew into a long-term one, its scope was continuously expanded. Pioneering efforts in recruiting multiple cohorts, spousal dyads and several generations of family members as well as genotyping and obtaining health histories and neuropsychological measures, among other factors, make the SLS an even more sophisticated, hip, and increasingly valuable resource for the study of adult development and aging. In this paper, we highlight how, as the study and its participants continue to develop, unique aspects of the design and data collections will allow for elegant articulations, testing, and understanding of aging.

THE MULTIDIMENSIONAL NATURE OF PSYCHOLOGICAL CHANGE ACROSS ADULTHOOD AND OLD AGE: COHORT DIFFERENCES IN AGING AND DYING

D. Gerstorf, N. Ram, *Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Lifespan and gerontological research has long been interested in better understanding how and why successive cohorts differ in key functional characteristics. Typically, later-born cohorts have been found to be cognitively and physically fitter than earlier-born cohorts when being examined at the same age range, although noteworthy exceptions have been documented as well. Much less is known, however, about cohort differences in other functional domains such as personality or whether the rate of change is altered between successive cohorts. We replicate and extend earlier reports from the SLS (Schaie, 2005) by using growth curve analyses to demonstrate that later-born cohorts (born 1914-1941) show consistently shallower age-related declines between 50 and 80 years of age on measure of fluid and crystallized abilities as well as personality than do earlier-born cohorts (1886-1913). We will also report initial evidence to suggest that cohort differences exist in the experience of dying.

THE WITHIN- AND BETWEEN-PERSON STRUCTURE OF INTELLECTUAL DEVELOPMENT ACROSS THE LIFESPAN

M. Martin, D. Zimprich, *University of Zurich, Zurich, Switzerland*

Individuals' cognitive aging is a lifelong process, but even longitudinal studies examining aging typically span shorter timespans than the phenomenon of interest. Thus, although the aim of many developmental models is to describe and explain within-person changes across the lifespan, empirical findings are mainly based on interindividual differences data or the between-person age-range is substantially larger than the within-person age range. The SLS (Schaie, 2005) is unique in allowing to compare within- and between-person structures of longitu-

dinal change over several decades. We present results from multilevel factor analyses comparing the structure of change in intellectual functioning over 28 to 42 years within and across individuals. The results suggest that these structures are not identical and shed new light on common cause and dedifferentiation theories of intellectual aging.

SPOUSAL INTERRELATIONS IN LIFE SATISFACTION WITHIN THE SLS: HIGH SIMILARITIES IN LEVELS AND CHANGE OVER TIME

C. Hoppmann¹, D. Gerstorff², S.L. Willis³, W. Schaie³, *1. Psychology, University of British Columbia, Vancouver, British Columbia, Canada, 2. The Pennsylvania State University, University Park, Pennsylvania, 3. University of Washington, Seattle, Washington*

Development does not take place in isolation and is often interrelated with close others such as marital partners. This may be particularly true in old age when networks decrease and spouses attempt to optimize the emotional climate in their relationships. The present study uses 35-year longitudinal information from both members of the couple to address interrelations among spousal life-satisfaction trajectories across midlife and into old age. Latent growth curve models show moderate associations in spousal life satisfaction levels. Interestingly, findings further demonstrate high spousal similarities in life satisfaction changes over time. Results are in line with propositions by lifespan scholars emphasizing an interactive minds perspective by showing that adult life satisfaction waxes and wanes in close association with the respective spouse. These findings complement past individual-centered work on age-related changes in wellbeing by pointing to the importance of using the couple as the unit of analysis.

SESSION 510 (SYMPOSIUM)

ALTERNATIVE AND COMPLEMENTARY THERAPIES FOR HEALTHY AGING

Chair: *N.E. Richeson, College of Nursing and Health Professions, University of Southern Maine, Portland, Maine*

Discussant: *S.C. Burgener, University of Illinois Urbana Champaign, Urbana Champaign, Illinois*

The purpose of the symposia is to examine complementary and alternative therapies (non-traditional methods of treatment) for healthy aging. The National Center for Complementary and Alternative Medicine reports that 38% of adults in the United States utilize complementary and alternative medicine (CAM). CAMs offer an alternative or adjunct therapy that has lower risk of adverse side effects, and offer a new perspective: healing the patient rather than simply treating them. Quality of life must be considered; more medications and medical interventions do not always equal increased quality of life. The interventions presented in these symposiums promote a holistic approach (mind, body, and spirit) to wellness. The symposia will highlight four interventions. Reiki, an energy medicine intervention has been shown to effect of pain, depression, and anxiety in community-dwelling older adults. An Animal Assisted Therapy intervention was tested and found to have positive effects on passivity and mood for difficult to engage residents in a rural nursing home. A bedside Brain Fitness intervention was used with nursing home residents and found to positively effect functional outcomes of attention, organized thinking, and cognition for nursing home residents with delirium. Lastly, a cranial electrical stimulation intervention was used to lessen sleep disturbances and depressive symptoms in older adult caregivers for persons with dementia. In all interventions the effectiveness of complementary and alternative therapies on the lives of older adults will be emphasized.

A PILOT STUDY OF THE USE OF REIKI IN COMMUNITY DWELLING OLDER ADULTS

N.E. Richeson, J.A. Spross, K. Lutz, *College of Nursing and Health Professions, University of Southern Maine, Portland, Maine*

The purpose of this research study was to evaluate the effect of Reiki as an alternative and complimentary approach to treating community dwelling older adults who experience pain, depression, and/or anxiety ($M = 63.8$, $SD = 4.9$). The subjects ($N=20$; 12 females and 8 males) were randomly assigned to an experimental or waitlisted control group. The pre and posttest measures included the Hamilton Anxiety Scale (HAM-A), Geriatric Depression Scale – Short Form (GDS-15), Faces Pain Scale (FPS), and heart rate and blood pressure. The eight week intervention is based on the transactional model of stress and coping. A mixed method research design using experimental as well as qualitative methods was used to examine the effects the Reiki intervention on outcomes. Significant changes post-treatment were found for pain, depression, and anxiety, while no changes in heart rate and blood pressure were noted. The qualitative findings reported the emergence of four broad themes: relaxation; improved physical symptoms, mood and well-being; curiosity and a desire to learn more, enhanced self-care, and sensory and cognitive responses to Reiki.

ANIMAL ASSISTED THERAPY: RESULTS FROM A RURAL NURSING HOME RECREATION THERAPY OUTREACH PROJECT

L. Buettner, *University of North Carolina at Greensboro, Greensboro, North Carolina*

Animal Assisted Therapy (AAT) draws on the bond between animals and humans in order to aid in the improvement of an individual's function and is being increasingly used in various therapeutic environments. Many nursing care, assisted living, and retirement living facilities incorporate pet visitation programs as social visits but the purpose of this intervention study was to provide a head to head pilot clinical trial of AAT as compared to recreation therapy without an animal to "difficult to engage" nursing home residents in a rural NC. Twenty consenting participants were assigned to either an AAT experimental group or a Recreational Therapy (RT) control group. AAT and RT were conducted for the respective groups during six weekly visits over a six week period. AAT was shown to significantly decrease passive behaviors and significantly improve mood. The traditional recreation therapy control group did show improvements but none were significant.

CRANIAL ELECTRICAL STIMULATION: POTENTIAL USE FOR DISTRESSING SYMPTOMS IN OLDER ADULT CAREGIVERS

K. Rose, *University of Virginia, Charlottesville, Virginia*

Family members provide the majority of care to persons with dementia. Unpaid family caregivers will likely continue to be the largest source of long-term care services in the U.S. and are estimated to reach 37 million caregivers by 2050, an increase of 85% from 2000 (Health and Human Services, 2003). Yet, effective interventions for sleep disturbances and depressive symptoms that family caregivers routinely experience are limited. This study tested the effects of cranial electrical stimulation (CES) in lessening sleep disturbances and depressive symptoms in community-dwelling older adult caregivers of persons with dementia (Rose, Taylor, Bourguignon, Utz, & Goehler, 2009). Results from this double-blind, randomized, controlled trial ($n = 38$) will be presented, as will a review of CES, its proposed mechanism of action, and potential uses in persons with dementia. Data from this study suggest that CES may be an effective treatment strategy for older adult caregivers.

COG-RT: IMPACT OF BEDSIDE BRAIN FITNESS ON FOCUS AND FUNCTIONAL OUTCOMES IN REHABILITATION PARTICIPANTS

L. Buettner, S. Fitzsimmons, *University of North Carolina at Greensboro, Greensboro, North Carolina*

With MDS 3.0 offering Medicare eligible clients the opportunity for physician ordered, time limited, recreation therapy the aim of this study was to produce and evaluate a specific cognitive protocol for use with older adults with delirium upon entering the nursing home for rehabilitation. This study explored the potential use of 36 specific structured brain fitness exercises (Fitzsimmons, 2008) provided bedside for improving the attention, organized thinking, cognition, and overall function. In this randomized pilot of 20 older adults 10 participants received usual care and 10 participants received a daily 30-minute brain fitness session until confusion was resolved. Detailed data was collected on engagement levels, cognitive and functional outcomes for both groups. Measures included the MMSE, CAM, Barthel Index, and a variety of rehabilitation outcomes. Evidence suggests that challenging and evidence based cognitive exercises should be a key component of every nursing home rehabilitation program.

SESSION 515 (PAPER)

CHRONIC DISEASE MANAGEMENT AND OUTCOMES

THE SYMPTOM OF HEARING LOSS: EXPLANATORY POTENTIAL OF THE SYMPTOM MANAGEMENT THEORY

M.I. Wallhagen, W. Strawbridge, *Physiological Nursing, University of California, San Francisco, San Francisco, California*

Purpose: Hearing loss (HL), the subjective experience of hearing impairment, is a common symptom affecting approximately 50% of individuals 75 and older, and associated with negative outcomes. Few data are available on this experience and how it affects and is affected by close relationships. This information could inform interventions to maximize healthy, engaged aging. Method: 4 year longitudinal qualitative study explored the experience of HL in older adults and their communication partners (CP) (spouse, adult child, close friend). Individuals with untreated HL were recruited and identified a CP. Interviews occurred concurrent with a hearing evaluation (baseline), 3 months, and 12 months, were audio-tape recorded, transcribed verbatim, and analyzed using grounded theory techniques. Evolved concepts and themes were explored within the Symptom Management Theory (SMT) to assess whether the theory facilitated further understanding to guide interventions. Results: 91 dyads were interviewed at baseline. Emerging themes and concepts included perceived stigma, perceived severity, expectations of hearing aids and treatment, prior experiences, strategies to deal with HL, motivators, impact, and external factors. Themes and concepts fit within the three major components of the SMT, although the "components of management strategies" was less well defined. Conclusions: The SMT provided a valuable conceptual frame for parsing and organizing emerging concepts and themes, and providing insights into potential relationships. Limitations identified included how to incorporate the contextual embeddedness of the experience and how to capture changing experiences across time. Identified limitations provide insights into how the theory might be revised.

TIGHT GLYCEMIC CONTROL CONFERS ENHANCED SURVIVAL IN ELDERLY INTENSIVE CARE UNIT (ICU) PATIENTS

A. Rabiee^{2,1}, P. Galiatsatos¹, V.M. Andreasik¹, B.R. Gibson¹, D.K. Andersen¹, C. Christmas², D. Elahi^{1,2}, *1. Johns Hopkins Bayview Medical center, Department of Surgery, Baltimore, Maryland, 2. Johns Hopkins Bayview Medical center, Department of Medicine, Baltimore, Maryland*

Objective: Intensive insulin therapy (IIT) in critically ill ICU patients has been shown to normalize blood glucose and reduce mortality in most studies, but glycemic control in elderly ICU patients has received little attention. We examined the efficacy of IIT in elderly Surgical (SICU) and Burn ICU (BICU) patients with respect to sepsis and mortality. Methods: 2252 patients were admitted to our SICU/BICU during an 18 month period; 650 (29%) were 65 years of age or older. Of the 2252 patients, we studied 58 who received IIT for at least 72 hours, of which 27 were ≥ 65 years. The subjects were dichotomized to tight control (mean blood glucose (BG) <150 mg/dl on day 3) and poor control (BG >150 mg/dl). Results: Mortality in the SICU was higher in the elderly compared to young (43% vs. 7%, $p<.03$), despite similar rates of sepsis (56 % vs 48%). In the elderly only 44% of patients achieved tight glycemic control vs 71% in the young, but mortality in the elderly who achieved tight glycemic control was only 8% compared to 67% in the poorly controlled group ($p=.007$). Sepsis was associated with 77% of deaths overall, but tight glycemic control was associated with a reduction in the mortality from sepsis, which was especially pronounced in elderly patients. Conclusions: Tight glycemic control is harder to achieve in elderly ICU patient than in the young, perhaps due to insulin resistance, but the survival from septic events is increased in elderly critically ill patients when tight glycemic control is achieved.

LONELINESS, DEPRESSION, SOCIAL SUPPORT, AND QUALITY OF LIFE IN CHRONICALLY ILL OLDER APPALACHIANS

L.A. Theeke, *Health Restoration, WVU School of Nursing, Morgantown, West Virginia*

The purpose of this cross-sectional pilot study is to understand the relationship between psychosocial factors and chronic illness indicators in older Appalachians. A sample of 60 older Appalachian adults was interviewed using the UCLA Loneliness scale, the Geriatric Depression Scale, the Katz ADL Scale, the MMSE, the MOS Social Support Scale, the CASP-12 quality of life assessment, a demographic data collection form and the SF-36. Medical record data was then obtained for chronic illness diagnoses, medication use, fasting glucose, Hgb A1C, Blood Pressure, Pulse, Height Weight, lipid panels, creatinine, and estimatedGFR,. Descriptive and bivariate analyses were conducted using SPSS to evaluate for relationships between loneliness, depression, social support, and quality of life and these specific chronic illnesses and their control indicators. Results of this study further our knowledge regarding the incidence of loneliness and depression, self-reported perceptions of quality of life, and the importance of functional ability to older Appalachians when the sample experienced very high incidences of multiple chronic illnesses and complicated medication regimens. Future research plans include the design and testing of an individualized intervention for loneliness, future study of the effect of an online chronic disease self-management program on chronic illness control indicators, loneliness and social support; and the contribution of interacting psychosocial factors to depression and suicidal ideation.

THE ROLE OF METABOLIC CONTROL ON COGNITION IN OLDER DIABETICS WITH MILD COGNITIVE IMPAIRMENT

A.M. Abbatecola, G. Paolisso, *Geriatric Medicine & Metabolic Disease, Second University of Naples, Italy, Naples, Italy*

Type 2 diabetes mellitus (T2DM) has been consistently associated with a higher risk of cognitive decline, especially Mild Cognitive Impairment (MCI). Such findings suggest that T2DM can predict cognitive impairment through mechanisms affecting the amyloid accumulation or indirect mechanisms, namely cerebrovascular disease. Considering that insulin resistance (IR) is a critical component in the causal pathway to cognitive impairment, the objective of our study was to test the association of IR on the variation of cognitive performance in older person with T2DM in poor metabolic control and MCI (n=97) in diverse anti-diabetic oral treatments: metformin (1000mg/day) (n=30), metformin (500mg/day) + rosiglitazone (4mg/day) (n=32) or in diet therapy (n=35), over a 36 observation week period. The neuropsychological battery consisted of the mini mental state examination (MMSE), rey verbal auditory learning total recall (RAVLT), trail making tests (TMT) which was performed at baseline and every 12 weeks for 36 weeks along with biochemical and clinical testing. Metabolic control parameters (fasting plasma insulin (FPI), fasting plasma glucose, HbA1c) significantly improved in metformin and the metformin+rosiglitazone groups only. Metformin+rosiglitazone group maintained cognitive stability on all cognitive tests, while the other groups (metformin and diet) showed a significant decline in TMTB and RAVLT over time. Using linear mixed effects models the decline FPI levels was independently associated with cognitive stability in the memory test in the group in treatment with metformin + rosiglitazone. Conclusion: These findings suggest that an improvement in IR in older persons with T2DM and MCI may protect against cognitive decline.

NONVERBAL COMMUNICATION ACCURACY: PARKINSON DISEASE COUPLES COMPARED TO MATCHED, WELL-ELDER COUPLES

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Nonverbal (NV) communication is critical to expressing and interpreting emotional intentions, leading to social competency and caring relationships. It may be especially important for elders given the potential for reduced sensory acuities and chronic progressive illnesses like Parkinson disease (PD). Our aim was to compare nonverbal communication accuracy of PD couples to that of matched well-elder couples. The Marital Communication Scale for PD (MCS-PD) was administered to 33 PD and 23 well-elder couples in their homes. PD elders and matched well-elders were filmed sending their partners 27 messages (9 messages each with 3 emotional intentions—positive, neutral, negative). Verbal content was controlled. Partners assessed emotional intention using mates' NV cues. Data also were collected on relationship length and satisfaction. PD partners' mean MCS-PD scores (12.9, SD=3.1) were significantly lower than well-elder partners' scores (18.4, SD=3.6; $p < .001$). PD partners also identified significantly fewer positive and negative messages compared to neutral messages ($p < .001$). Both PD and Well-Elder partners evidenced a significant negative correlation ($p < .05$) between MCS-PD scores and relationship length. PD partners' lower overall accuracy and reduced accuracy in identifying positive and negative messages compared to well-elders suggest a critical limiting effect of PD on nonverbal communication, putting the couple at risk for consequential miscommunication and social isolation. Furthermore, the association of lower accuracy with longer relationships may compound PD care partner fatigue or distancing. If risk of compromised NV communication can be identified, PD couples can be coached in alternative expressions of communication.

SESSION 520 (PAPER)

COGNITION - HS PAPER SESSION

FACTORS ASSOCIATED WITH COGNITION IN ADULTS USING DATA FROM THE SEATTLE LONGITUDINAL STUDY

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Cognition is critical for maintaining activities of daily living and independence in older adults who are at increased risk for cognitive impairment and dementia. Understanding factors that affect cognition will likely facilitate intervention development to prevent cognitive decline and its associated health and social consequences, e.g., functional disability, loss of independence, poor quality of life, increased risks for hospitalization and institutionalization, and high health care expenditure. The purpose of this study was to examine the association of four factors (leisure-time physical activity, leisure-time cognitive activity, work control, and hypertension) with changes in two aspects of cognition (verbal memory and inductive reasoning). This study is a secondary analysis of data generated from the Seattle Longitudinal Study (SLS). The SLS uses a successive cohort design, with the first cohort recruited in 1956. Follow-ups occurred every seven years with new samples added at each follow-up. Using multi-level modeling, data for 626 eligible adults who were followed from 1984 to 1998 were analyzed in this study: average age of 53 years in 1984, 15 years of education, 95% white, 56% female, and 50% with income of $\geq \$28,000$ ($= \$73,360$ in 2008). Higher work control was associated with better verbal memory ($p < .05$) and inductive reasoning ($p < .01$), while leisure-time physical activity, cognitive activity and hypertension were not. There were no significant interactions among the four factors. The findings imply that even for people who are socioeconomically advantaged, a strong sense of work control may be protective for cognition in old age.

VITAMIN D DEFICIENCY AND COGNITIVE DYSFUNCTION IN OLDER ADULTS

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Background: Vitamin D deficiency is highly prevalent in older adults and is associated with fractures, various chronic conditions and mortality. Cognitive dysfunction and dementia are also common in older adults, although their etiology remains unclear. Vitamin D may help to prevent neurodegeneration as it plays an important role in the expression of neurotrophic factors, neurogenesis, calcium homeostasis, and detoxification. Findings: Small clinical studies provide equivocal evidence linking low serum 25-hydroxyvitamin D [25(OH)D] to cognitive dysfunction. McGrath and colleagues observed no linear association between serum 25(OH)D and verbal memory in 4809 noninstitutionalized older adults from the Third National Health and Nutrition Examination Survey (NHANES III). However, Llewellyn and colleagues recently observed a significant association between low 25(OH)D and increased odds of cognitive impairment in 1766 older adults from the Health Survey for England (HSE). Dhese and colleagues found that vitamin D supplementation was associated with improved choice reaction times after 6 months in 139 ambulatory participants with a history of falls. Similarly, Przybelski and colleagues observed a small improvement in clock drawing performance following vitamin D supplementation, though not verbal fluency, over 4 weeks in 25 nursing home residents who were 25(OH)D deficient at baseline. Conclusions: No prospective population-based studies have examined vitamin D status in relation to cognitive decline or dementia. Further evidence from well-designed trials is also needed. If vitamin D deficiency is causally

related to cognitive dysfunction then this would be of major public health significance as oral vitamin D supplementation is well tolerated, effective and economical.

TARGETED INTERVENTIONS IN OLDER ADULTS EXPERIENCING MILD COGNITIVE IMPAIRMENT

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The purpose of this descriptive, correlational study was to describe three domains of function (physical, affective, cognitive), and the targeted interventions of an interdisciplinary team in outpatient MCI patients in a Center for Healthy Aging in Virginia at intake, 12, and 24 months. This secondary analysis evaluated patterns of change in function and interventions over time utilizing established criteria for MCI (Peterson, 2001; Winblad et al., 2004) emphasizing self-management and delay of decline. Interventions are described within categories of functional performance on 3 measures. Measures included the IADL (Lawton and Brody, 1969), the GDS (Yesavage et al., 1983), and memory and cognitive function with subscales of the Rey Auditory Verbal Learning Test (AVL), the Wechsler Memory Scale-Revised (WMS-R) for Logical Memory, and the CLOX 1 (Royall, 1998) drawing. Interventions targeted to MCI patients were categorized from chart audit to physical, affective, or cognitive domain of function and interventions categorized as primary, secondary, or tertiary levels of prevention. The sample of 36 patients (mean age 73.08) had a 16.7% conversion to dementia within the 24 months. The remaining 30 patients demonstrated significant changes in affective function; depression improved at 12 months. Cognitive function showed significant change on 1 of the 3 measures, the CLOX 1 demonstrated significance in the pairwise comparisons between intake and 12 months. Implications for practice include routine screening for memory and mood in older adults. The targeted interventions provide potentially beneficial care in preventing or delaying conversion to dementia and offer opportunities for self management.

ARTERIAL STIFFNESS AND DOMAIN-SPECIFIC COGNITIVE DECLINE IN WELL-FUNCTIONING OLDER ADULTS

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Some regions of the brain are particularly sensitive to hypertension, suggesting that central arterial stiffness as measured directly may affect some cognitive domains more than others. We evaluated the relationships of pulse wave velocity (PWV), a measure of arterial stiffness, with cognitive function and decline in the Health, Aging and Body Composition Study Cognitive Vitality Substudy (mean age \pm SD 75.3 \pm 2.7 years, 48% men, 49% black). Cross-sectional analyses included 552 participants with baseline PWV and cognitive data at Year 3 after excluding those with evidence of cognitive impairment (N = 75) or decline (N = 100). Of the 552 participants, 406 completed cognitive testing at Year 9 and were included in analyses of cognitive decline. PWV (cm/s) was measured at baseline via Doppler-recorded carotid and femoral pulse waveforms. Multiple cognitive domains were evaluated over six years. Each 1-SD higher PWV was cross-sectionally associated with lower cognitive function: -0.11 SD for global function (p = 0.003); -0.08 SD for psychomotor speed (p = 0.04), and -0.10 SD for perceptual speed (p = 0.009) after adjustment for demographics, BMI, physical activity, smoking, heart rate, systolic blood pressure and comorbidities. Higher PWV was further associated with greater decline in psychomotor speed, defined as >1 SD from the mean change: OR 1.34 (95% CI 1.03, 1.75). PWV was not associated with verbal memory cross-sectionally or decline in global function, verbal memory or perceptual speed. Arterial stiff-

ness may preferentially affect frontal-subcortical regions that mediate psychomotor speed.

TARGETED MEMORY TRAINING FOR FRAIL ASSISTED LIVING RESIDENTS

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Targeted interventions are critical to efficiently achieving desired clinical outcomes. This pilot study interviewed frail assisted living (AL) residents to elicit their specific memory challenges and concerns. A 6-session tailored intervention targeting memory skills important for AL living, emphasizing remembering names was developed and pilot tested with seven volunteer residents. Participant responses on the Memory Complaint in Age-Associated Memory Impairment Questionnaire (MAC-Q) were significantly higher after the training program (paired t-tests ranged from $t=2.67-7.906$, $p = .001-.043$) for self-efficacy in remembering names, phone numbers, lists of items, and facts. Objective memory improvement measured using the Rivermead Behavioral Memory Test was not statistically significant. However, 43% of participants improved in remembering first and/or last names. Ongoing testing on larger samples should assess the maintenance of memory abilities over time as well as effects on daily functioning and length of stay in AL.

SESSION 525 (PAPER)

CULTURES OF CARE

HOW NURSING HOME CULTURE INFLUENCES FEEDING TUBE USE FOR RESIDENTS WITH ADVANCED DEMENTIA

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There is no evidence supporting the use of feeding tubes for individuals with advanced dementia, yet one-third of nursing home (NH) residents with advanced dementia have feeding tubes. Researchers found large geographic and racial variability as well as clinical and facility factors associated with feeding tube use. Less is known about why they are used in some NHs and not others. The purpose of this ethnographic study was to explore the culture of two NHs in a southern state where rates of feeding tubes are high. Two NHs were purposefully selected with high ($>40\%$) and low ($<10\%$) rates of feeding tube use. Data describing physical structure, mealtime and decision making processes, and explicit, as well as implicit, views were collected through 80 hours of direct observation, semi-structured interviews with 24 key stakeholders, and document review. Qualitative analysis revealed differences in each category. In the low rate NH, the physical environment was pleasant; mealtime processes were well staffed; families were involved early in feeding decisions; the explicit and implicit views were family centered, and the organization valued hand feeding residents with advanced dementia. In contrast, the physical environment in the high rate NH was unpleasant; mealtimes were poorly staffed; families were involved late in feeding decisions; the implicit value was recovery, and the organization implicitly valued feeding tubes to prevent aspiration and meet regulations. Findings hold important implications for practice, policy, and future research.

BUILDING A MODEL OF QUALITY CARE FOR THE HOSPITALIZED OLDER ADULT

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Despite the fact that older adults constitute the majority of patients in the acute care setting, very few hospitals have implemented system-wide initiatives designed to meet their specialized needs. These organizational shortfalls compound the older patient's vulnerability to hospital-associated complications. The development of a comprehensive organizational model is an essential step toward disseminating measurable, effective, and replicable organizational best practices around care of older adult patients. Web-based concept mapping techniques were used to engage hospital staff in multiple levels and disciplines, national experts, researchers, and consumers (a total sample of 458) in defining the core components of a comprehensive system-wide program designed to improve the quality of care provided to hospitalized older adults. Multidimensional scaling and hierarchical cluster analysis yielded an outcome logic model which described the following components of quality: aging-responsive leadership, an aging-sensitive social and physical environment, gerontologic-specific interdisciplinary staff development, and a multi-focal approach to measuring quality.

PROMOTING PERSONHOOD AMONG NURSING HOME RESIDENTS LIVING WITH DEMENTIA

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The purpose of this pretest-posttest, quasi-experimental study was to evaluate the effect of individualized, or person-centered life history collages on nursing staff knowledge about individual residents living with dementia (RLWD) and subsequently, nursing staff perceptions of person-centered care (PCC) practices. Based on Kitwood's Theory of Personhood, improved knowledge and perceptions of RLWD may lead to improved personhood status. The principal investigator (PI) recruited a convenience sample of 36 nursing staff members (18 experimental and 18 control), who cared for 5 RLWD in two similar nursing homes (NHs). Open-ended questionnaires were utilized to assess three categories of nursing staff knowledge about individual RLWD: 1) family, 2) jobs/career, and 3) past and current likes, dislikes, and interests. In addition, nursing staff perceptions of PCC practices were assessed with the "Staff-based Measures of Individualized Care" (SBMIC) instrument. The SBMIC includes Likert-type scales to measure the following perceptions of PCC practices: 1) knowing the person/resident, 2) staff-to-resident communication, and 3) staff-to-staff communication. Intervention staff members were exposed to Life History Collages for a period of 4 weeks. Pre-test, post-test, and 3 weeks post-intervention data were analyzed with multivariate analysis of covariance (MANCOVA) and analysis of covariance (ANCOVA) statistical methods. Although overall NH staff knowledge of RLWD improved significantly in the treatment group, compared to the control group, at post-test ($p < .01$) and 3 weeks post-intervention ($p < .001$), perceptions of individualized care/PCC practices did not. Potential reasons for insignificant findings in perceptions of PCC practices are explored and suggestions for future research are discussed.

IMPROVING CARE TRANSITION OF OLDER ADULTS WITH COMMUNITY HEALTH ADVISORS

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A considerable body of research indicates that community health workers/advisors are an important component of programs addressing the health care needs of communities (HRSA, 2007). Much of the related research documents that involving CHWs in health care delivery is a cost-effective strategy as they have contributed to enhancement of indi-

viduals' adherence to recommended health behavior changes, self-control of their health conditions, and their access to health care (Brownstein, Bone, Dennison, Hill, Kim, & Levine, 2005). The CHW workforce is among the most rapidly growing lines of work (HRSA, 2007) and is projected to continue growing. The addition of CHWs into the health care team is a creative approach to prevention and control of many health conditions. However, an understanding of the role of CHWs and their incorporation into the health care delivery system remain a major challenge. This presentation will report the results of a three-year program in which trained CHWs were placed with older adults to assist them in learning how to manage their chronic condition and in accessing the health and social services they need. The presentation will also present opportunities, challenges and solutions to the institutionalization of CHWs. After attending this presentation, participants will be able to define CHWs, identify appropriate uses of CHWs, discuss the challenges of institutionalization of CHWs, and gain knowledge of the key issues of incorporating CHWs into healthcare services.

PROMOTING READINESS AND INTEREST IN PATIENT SELF MANAGEMENT: A QUALITATIVE STUDY

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Patient-centered interventions focused on self-management can improve patient outcomes among chronically ill patients. However, relatively little research has been done to investigate patients' perspectives on potential barriers, motivators, and facilitators of self-management. Building on a study assessing the effects of a hypertension support program on patients' self-management, this study examined the factors influencing changes in patients' confidence/readiness to manage their chronic conditions measured by the Patient Activation Measure (PAM). Open-ended qualitative interviews were conducted with a sample of 60 African American patients, including 30 patients with an increase of 4 or more points in PAM score from baseline to 12-month follow-up, and 30 patients with a 4-point decrease. Interviews focused on participants' views on: managing their health and medications; their relationships with their doctors; and their social support networks. Interviews were voice-recorded and transcribed verbatim. The investigators coded the transcripts using a hierarchical coding system developed from the initial 20 interviews and used NVIVO 7 to facilitate analysis of emergent themes. Two key motivators for self-management emerged: (1) the potential loss of mobility due to worsening of chronic conditions; and (2) awareness of the potential illness trajectory, often heightened by "cautionary tales" from relatives and friends. Patients with a decline in activation were more likely to name their physician as the primary person responsible for managing their health. Findings suggest that motivational interviewing should emphasize the relationship between self-management, patients' mobility, and quality of life to encourage patients to take an active role in their care.

SESSION 530 (POSTER)

DENTAL CARE AND SPIRITUALITY FOR SPECIAL POPULATIONS

IMPACT OF CHAPLAIN SERVICES ON SPIRITUAL WELL-BEING AND FORGIVENESS OF REHABILITATION PATIENTS

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Spirituality and religious beliefs have been identified as possible protective factors for patients coping with disabling medical illness (Chally & Carlson, 2004; Giaquinto, et al, 2007). This pilot study

assessed the spiritual well-being and dispositional forgiveness of older rehabilitation patients who received spiritual care services from hospital chaplains. Participating older individuals ($n = 25$) were assessed following admission to a rehabilitation hospital and again at hospital discharge. The impact of receiving chaplain services on diverse aspects of spiritual well-being and forgiveness was explored. Paired samples t -tests were used to compare participants' pretest and posttest scores. Significant differences were found in pre to posttest scores on existential well-being ($t(24) = 2.29, p < .05$). Although a significant change was not found in pre to posttest scores on the forgiveness of others subscale, significance was approached ($t(24) = -1.72, p < .10$). Paired samples t -tests for specific forgiveness items revealed participants were less likely to punish others for wrongdoings at posttest ($t(24) = -2.19, p < .05$). No significant differences were found in global spiritual well-being, religious well-being or other components of forgiveness. Results of this pilot study support a favorable association between chaplain services, increased sense of life meaning and greater forgiveness of others in specific domains among rehabilitation patients. While preliminary, findings provide the rehabilitation community with insight into the potential benefits of integrating spiritual/religious interventions into holistic patient care. Future research should focus on the relationship between specific spiritual care methods, spiritual well-being, forgiveness, and physical health in rehabilitation patients.

DENTAL CARE AND ASSOCIATED FACTORS AMONG OLDER ADULTS WITH SCHIZOPHRENIA

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Objectives: There are little data on dental care among older adults with schizophrenia. This study examines the prevalence of dental care and factors related to dental treatment in this population. **Methods:** The sample consisted of 198 community dwelling persons aged >55 with schizophrenia and a matched group of 113 persons in the community. Subjects received a 2 1/2 hour interview that included various instruments assessing psychiatric, physical, cognitive, social, and functional status. We used an adaptation of Krause's Model of Illness Behavior in Later Life as the basis to select 18 predictor variables. **Results:** There were no differences between the schizophrenia and community comparison groups in the percentage with at least one dental visit annually (48% and 54%, respectively). However, there were significant differences in the percentage of persons who stated that they had problems with their teeth/dentures (41% and 23%, respectively). When separately examining the schizophrenia group, we found that 8 variables were significant in bivariate analysis. However, only 3 variables—financial well-being ($OR = 1.12$), better executive cognitive functioning ($OR = 1.11$) and fewer perceived problems with teeth/dentures ($OR = 0.33$)—were significantly associated with dental visits at least once annually; fewer oral dyskinesia attained near significance. **Conclusions:** Older adults with schizophrenia do not receive the recommended level of dental care, although they are no worse than their age peers; however, they report more problems with their teeth/dentures. Further exploration is needed as to why the latter group is not seeking care. Also, identifying persons with more cognitive difficulties may increase dental visits.

SESSION 535 (PAPER)

DISABILITY

DIFFICULTY WALKING 1/4 MILE PREDICTS SUBSEQUENT DISABILITY AND DEATH

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The ability to walk 1/4 mile is often used to measure the outcome of mobility disability, but less is known about 1/4m walk ability as a risk factor for subsequent disability. The objective of this study was to determine if 1/4m walk ability predicts subsequent mortality and disability among Medicare beneficiaries aged ≥ 65 years. Disability in instrumental and basic activities of daily living (I/ADLs) was categorized as none, 1-2, or 3+ limitations. We used data from the 2003 and 2004 Medicare Current Beneficiary Survey, a nationally representative survey. Our longitudinal sample ($N = 5598$) had a weighted mean age 75.5 and was 81% white and 57% female. At baseline 56% were able to walk 1/4 mile without difficulty, 28% had difficulty, and 17% were unable. After adjusting for sociodemographics, chronic conditions, smoking, body mass index, and baseline I/ADLs, 1/4m walk difficulty or inability was associated with increased risks of IADL difficulty, ADL difficulty, and mortality at one year. Adjusted OR (95% CI) for 1/4m walk difficulty were: 1-2 IADLs: 1.77 (1.45-2.16); 3+ IADLs: 2.74 (1.91-3.93); 1-2 ADLs: 2.57 (2.08-3.18); 3+ ADLs: 3.06 (1.98-4.73); death 1.95 (1.33-2.85). Results for 1/4m walk inability were: 1-2 IADLs: 2.18 (1.64-2.90); 3+ IADLs: 4.40 (2.91-6.65); 1-2 ADLs: 3.30 (2.49-4.37); 3+ ADLs: 4.85 (2.74-8.59); death 3.71 (2.37-5.80). Among Medicare beneficiaries, 1/4m walk difficulty or inability is independently associated with substantially increased risk of disability and death one year later, and may serve as a simple clinical indicator of risk for future morbidity.

MOBILITY DISABILITY IN NONAGENARIANS FROM 1999 TO 2007: THE VITALITY 90+ STUDY

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Mortality rates for people aged 90 and over are decreasing, but little is known about the trends in disability prevalence. In the Vitality 90+ Study we compared mobility disability among population aged 90 and over in the city of Tampere, Finland, between the years 1996, 1998, 2001, 2003, and 2007. In 1996 and 1998 all home-dwelling and in 2001, 2003 and 2007 also all institutionalized people in this age group were included. Population numbers ranged from 550 to 1,146 and the response rate from 79% to 91%. The respondents were asked whether they were able to move indoors, walk 400 meters and use stairs. Among home-dwelling people, the percentage of those without mobility difficulty was lowest in 1998 (47%) and highest in 2001 (58%); among the whole population aged 90 and over the figure was 42 % in all three study years. The proportion of those disabled in all three mobility tasks decreased slightly. In all, there were no major changes and no clear trends in mobility disability in eleven years, although mortality deceased and life expectancy at the age of 90 increased.

PERSONAL MASTERY AND INCIDENT DISABILITY OVER SIX YEARS IN OLDER PERSONS: THE INCHIANTI STUDY

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Introduction: We tested the hypothesis that in older persons low sense of personal mastery, defined as the extent to which one regards one's life chance as being under one's own control, predicts disability during a 6-year follow-up. **Method:** This study is part of the InCHIANTI Study, a prospective population-based study of older persons. The sample consisted of 1079 participants aged 65 years and older. Personal mastery was assessed at baseline using Pearlin's mastery scale. Disabilities defined as the inability or needing help in activities of daily living (ADL), were assessed at baseline and at 3- and 6-years follow-up. **Results:** At baseline, participants with at least one ADL disability had significantly lower mean personal mastery scores compared to non disabled participants (15.6 ± 3.8 vs 19.7 ± 4.0 ; $p < .0001$). Among 990 participants without disabilities at enrollment, 121 (12.2%) developed at least one ADL disability during the follow-up. After adjustment for age, sex, MMSE, physical activity, IADL, number of chronic diseases and medications, CES-D and SPPB, participants in the third and fourth quartiles of personal mastery, compared to those in the highest quartile, had, respectively, a 2.9 (95%CI = 1.1–8.1) and 3.7 (95%CI = 1.4–10.2) higher risk of developing disability during a 6 year follow-up. **Conclusions:** In old age, persons with low sense of personal mastery had a higher risk of developing disability over time. Pathways linking personal mastery to disability, such as decreased mobility function, need to be studied.

THE IMPACT OF DIABETES AND HEART FAILURE ON LIFE-SPACE TRAJECTORIES

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The purpose of the study was to examine the impact of diabetes and heart failure on trajectories of life-space mobility among older adults. The UAB Study of Aging is a prospective longitudinal study of a random sample of 1000 Medicare beneficiaries from Alabama, stratified by gender, race, and urban-rural residence, recruited 1999-2001. Life-space, a measure of mobility, is based on distance, frequency, and independence of travel over a 4-week period (scores 0-120, higher scores indicating greater mobility). An analysis of variance of baseline life-space indicated significantly lower scores for persons with diabetes only ($M = 60.1$, $N = 207$), heart failure only ($M = 51.5$, $N = 85$), and both conditions ($M = 47.9$, $N = 45$) compared to persons with neither condition ($M = 68.0$, $N = 663$). Using data from six years of follow-up, longitudinal trajectories of life-space mobility were estimated using random-effects regression models. Linear models, controlling for race, age, gender, and rural residence, showed that persons with diabetes or heart failure had significantly greater declines across time than persons with neither condition. Significantly accelerated rates of decline in these two conditions were observed both before and after adjusting for baseline differences in life-space. For persons with both diabetes and heart failure, the rate of life-space decline across time more than doubled compared to persons with neither condition. Diabetes and heart failure independently contribute to life-space mobility declines.

SESSION 540 (PAPER)

ELDER ABUSE AND ETHICS

ANALYSIS OF RESPONSES IN AN ELDER ABUSE STUDY USING COMPUTER-ASSISTED VS. INTERVIEW TECHNIQUES

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Screening for elder mistreatment is extremely important in eradicating this serious public health problem. Research involving older adults is complex due to the variability in function and cognitive capacity with aging. Cohort and SES differences add to that complexity. Finally, the sensitive nature of elder mistreatment and family violence further complicates research strategies. We compared data from two studies using the Childhood Trauma Questionnaire (CTQ) to examine differences in responses based on modality of the interviews. Data from an elder neglect study ($N=162$) using interview-administered surveys were compared with data collected in another elder mistreatment study ($N=152$) using audio-assisted computer self-interview (ACASI). T-tests for continuous variables and chi-square tests for categorical variables were performed to examine whether differences between subject characteristics and subject scores on the CTQ and its subscales differed significantly. **Results:** The two study samples differed significantly on age, marital status, work status, financial background, and disease burden. Scores on the CTQ were significantly different with individuals in Study 2 (ACASI sample) scoring higher than those using the interviewer-administered instrument (Study 1). **Conclusion:** This is very important due to the dearth of information related to older adults and their willingness and capacity to use computer-assisted approaches for data collection. Further, it is important because elder mistreatment includes extremely sensitive questions, and is an understudied topic. These data suggest that the use of ACASI may provide the opportunity for fuller disclosure than interviewer-administered surveys.

SCREENING FOR ELDER MISTREATMENT IN A DENTAL CLINIC POPULATION

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Increasing screening in non-traditional settings (dental clinics) is likely to increase the number of cases of elder mistreatment (EM) ultimately identified and referred for social services. **METHODS:** We used the HS-EAST, (Hwalek et. al., 1996) a 15-item instrument which identifies those at high risk for EM, to screen adults over the age of 65 presenting for dental care at a large urban clinic. We chose the HS-EAST because it is brief, easily self-administered, and requires no physical examination. **RESULTS:** Using HS-EAST data from previous studies that have demonstrated that specific questions are likely to discriminate between those at risk and those not at risk, we report on the proportion of those (of 124 persons screened) who answered positively to seven questions. We found that 20.5% reported being uncomfortable with a family member, 11.3% reported that they feel nobody wants them around, 3.2% reported that someone in their family makes them stay in bed and tells them they are sick when they are not, 4.8% reported that someone has forced them to do things they didn't want to do, 11.3% reported that someone has taken things that belonged to them without permission, 2.4% reported that someone told them they give them too much trouble, and 2.4% reported that someone close to them has tried to hurt them recently. **CONCLUSIONS:** Screening for those at risk for EM in a community dental clinic is feasible and is likely to identify those at increased risk for EM.

ADULT ABUSE PREVENTION TRAINING: EVALUATION AND EVIDENCE OF SUSTAINED IMPACT ON DIRECT CARE

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A pilot research project of a new curriculum to train long-term care staff on adult abuse and neglect has demonstrated increased knowledge among participants. However, the question has persisted as to whether or not this knowledge actually translates into improved workplace recognition, reporting, and prevention of abuse. A subsample (n=303) of training participants was recruited to participate in a post-training anonymous telephone survey using a novel interactive voice response (IVR) system that automatically captures data. The survey focused on whether participants had witnessed adult abuse at their workplace and reasons for or barriers to reporting these events. Common barriers for not reporting suspected abuse included that it would not make a difference or that it would have a negative impact on them. Results indicated that 21% of the participants witnessed abuse since the training. Data were collected related to types of abuse, suspected offenders, and reasons for reporting or not reporting events. Qualitative data indicated direct care worker perspectives on how to reduce abuse in long-term care. All results indicated need for ongoing education that emphasizes prevention strategies that empower direct care workers. Further, this research demonstrated the ability of IVR technology to capture information from hard-to-reach populations on sensitive topics that might otherwise be difficult to attain. Specifically, it was critical to establishing a method in which to 1) provide a mechanism for workers fearful of retribution to confidentially share their experiences and 2) establish that knowledge of abuse was sustained over time and translated into actual workplace behavior.

SESSION 545 (POSTER)

LONG TERM CARE - HS POSTER SESSION

IDENTIFICATION OF POTENTIALLY REVERSIBLE RESIDENT FACTORS ASSOCIATED WITH REJECTION OF CARE BEHAVIORS

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[Background] Rejection of care behaviors can strain caregiver and nursing home (NH) resident interaction. Such behaviors can frustrate caregivers, leading to reduced interactions, withdrawal from the resident or ongoing confrontation. This strained relationship also frustrates residents and families. [Objective] We aimed to identify potentially reversible resident characteristics associated with rejection of care. [Methods] Primary data were obtained on 3230 residents scheduled for MDS assessments in 71 NHs across 8 states. Nurses identified residents who exhibited "reject evaluation or care (e.g., bloodwork, taking medications, ADL assistance) that is necessary to achieve the resident's goals for health and well-being". Measures of resident characteristics included mood (PHQ-9), cognition (structured cognitive testing or cognitive performance scale), delirium (Confusion Assessment Method). Data were analyzed via multiple logistic regression models that accounted for clustering by NH. [Results] Rejection of care was seen in 9.7%. Analyses identified male sex (OR 1.82, 95%CI 1.32-2.51), moderate and severe cognitive impairment (OR 1.59 95%CI 1.07-2.37, OR 2.71, 95%CI 1.80-4.08, respectively), presence of delirium (OR 2.15, 95%CI 1.32-3.51), minor and major depression (OR 1.58, 95%CI 1.09-2.30, OR 1.91, 95%CI 1.17-3.11, respectively), presence of delusion (OR 2.98, 95%CI 1.73-5.10), severe to horrible pain (OR 2.16, 95%CI 1.49-3.13) as associated factors. [Implications] In this large geographically diverse sam-

ple, six resident-level factors were associated with rejection of care. Four of these factors (delirium, depression, delusion and pain) are potentially treatable, implying that care rejection behaviors are modifiable and may resolve with appropriate, targeted interventions.

EXCEPTIONAL CARE PLANNING

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This presentation will discuss the training, implementation and results of a project using a new care planning technique with the goal of replacing the existing wasteful care planning process with an efficient and cost-saving one. The new care planning technique uses facility generated standards of care to replace the often inefficient, lengthy and repetitive care plans that most facilities currently use. Exceptional care planning uses standards of care (SOCs) as a baseline for care. The SOCs are universal and complement the care plan. The individual care plan then spells out specific needs of the individual resident that supplement and/or differ from the SOCs. Therefore, the care plan process is transformed from one that involves developing and using lengthy, repetitive, non-resident specific care plans for documenting care to one that uses highly personalized individualized care plans that take less time to write and implement, i.e., more quality in less time. The project was evaluated on the expected outcomes of (a) successful use of intervention and knowledge of implementation issues, (b) increased nurse and CNA efficiency, (c) improvement in resident outcomes, (d) increased staff retention, (e) documented cost savings within participating nursing homes. Results of the twelve nursing home study, including data on the above outcomes will be presented.

BREAKING THE ROUTINE: HOW RESIDENTS FIND RESPITE FROM THE WORLD OF THE NURSING HOME

R.J. Walent, University of California, San Francisco, San Francisco, California

This qualitative study explores how residents achieve respite from nursing home (NH) routines to support personal wellbeing. Specific aims are: (1) to identify, describe and analyze processes residents use to actually or virtually leave the world of the NH; (2) to document structural, social and personal facilitators and barriers to breaking away from facility routines. As part of an ethnographic study of "doing well" among older residents, this research examined 17 participants' experiences and perceptions of respite from NH routine. Study sites were a for-profit chain facility and a large public NH. Data included interviews on participants' perceptions of what it meant to do well, with probes to obtain information on trips out of the NH and on favorite activities. Participant observation focused on participants' daily activities and on environmental features that affected the ability to break from facility routines. Ongoing interpretive data analysis resulted in three themes related to respite from NH routines: actual getting out, virtual getting away, and leaving for good. Findings suggest selected respite strategies are rooted in preferences and values developed across the life span. Interestingly, virtual getting away was often achieved through reading, which also increased a sense of control. Participants' attitudes toward NH life were ambivalent. Thus, even participants who were exceptionally involved and committed to facility activities, reflected on the desire to leave for good. This research suggests that understanding how individual residents seek and achieve respite is a vital precursor to supporting well being.

LINKING TECHNOLOGY IMPLEMENTATION TO RESIDENT CENTERED CARE IN NURSING HOMES

R. Meador, BLCC, Cornell University, Ithaca, New York

This presentation will report on the findings from one component of a multi-component evaluation measuring the effects of electronic

medical records in long-term care. The demonstration project examined a variety of outcomes resulting from the installation of the technology in 22 participating nursing homes. Specifically, the results shed light on the linkage between the installation of electronic medical records and resident-centered care in two important ways. The study examined resident-centered care as an outcome variable and assessed the manner in which the adoption of digital medical records technology affected the level of resident-centered care provided by each of the fifteen participating nursing homes, and assessed resident-centered care as an independent variable in order to examine the effect of variance in the degree of resident centered care on the success or failure of the technology adoption. Thus, results provide an understanding of ways that technological change affects the degree to which nursing homes practice resident-centeredness and how resident-centered practices influences the adoption of technology.

PREVALENCE OF PSYCHOTROPIC DRUGS IN RESIDENTS OF GERMAN AND AUSTRIAN NURSING HOMES

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Background: Data from international studies show that psychotropic medications are frequently prescribed in nursing home residents throughout Western countries. Adverse effects of these substances are well known. We aimed to assess and compare psychotropic medications in nursing home residents in Germany and Austria. Characteristics associated with prescription were also explored. Method: Data on psychotropic medications were collected in three studies in Hamburg, Germany (cross-sectional study including 2367 residents of 30 nursing homes; baseline assessment of a randomised-controlled trial including 1125 residents of 58 nursing homes), and Vorarlberg, Austria (cross-sectional study including 1844 residents of 48 nursing homes). Psychotropic medication was coded according to the ATC-Classification. Prevalence rates of psychotropic and antipsychotic medication were compared. Cluster-adjusted multiple logistic regression analyses were performed investigating associations with psychotropic medication. Results: Institutional and residents' characteristics were comparable between the studies. Mean cluster-adjusted prevalences of residents with 1 or more psychotropic medication were 51.8% (95% CI 48.3-55.2) and 52.4% (48.4-56.1) in Germany and 74.6% (72.0-77.2) in Austria. Prevalences of residents with 1 or more prescription of an antipsychotic medication were 28.4% (25.2-31.7), 28.4% (24.2-32.7), and 45.9% (42.7-49.1), respectively. No nursing home and only few residents' characteristics were associated with psychotropic medication prescription, with only slight differences between studies. Conclusion: Frequencies of psychotropic drug prescription are substantial, highlighting the urgent need of reduction approaches. Currently, we are preparing a Cochrane Review on psychosocial interventions to reduce antipsychotic medication in nursing homes.

THE RELATIONSHIP BETWEEN PROPORTIONS OF LPN AND RN STAFFING AND NURSING HOME SURVEY DEFICIENCIES

M. Toles, *Duke University, Durham, North Carolina*

Background: Professional staff mix is theorized to be a significant component in the quality of nursing home outcomes. Since 2000, nursing facility use of LPN hours per resident per day are essentially unchanged, while RN hours are reduced by 25%. Because of the interdependent nature of LPN and RN collaboration, this change in staff mix may impact nursing home quality. Specific Aims: The purpose of this longitudinal study was to explore the relationship between proportions of LPNs in nursing staff mix (LPN / LPN + RN) and the quality of nursing home performance, as measured by survey deficiencies in U.S. nursing

homes between 2003 and 2007. Method: Using data from the Online Survey Certification of Automated Records (OSCAR), a mixed model was constructed 1) to control for structural characteristics of nursing homes and 2) to determine whether counts of survey health deficiencies vary over time with changes in proportions of nursing staff. Results: In a sample of U.S. nursing homes (n=14,930), our results indicate that greater proportions of LPNs in the LPN and RN staffing mix are associated with significantly greater (p=0.0001) counts of nursing home health survey deficiencies. Discussion: These results suggest that optimal nursing home performance may require special attention to staffing mix. Specifically, attention to the non-substitutability of LPNs for RNs in clinical nursing expertise is essential to avoid poorer quality of care.

SESSION 550 (SYMPOSIUM)

NURSING CARE OF OLDER ADULTS INTEREST GROUP SYMPOSIUM: CREATIVE APPROACHES TO HEALTHY AGING

Chair: C. Beel-Bates, *Kirkhof College of Nursing, Grand Valley State University, Grand Rapids, Michigan*

Discussant: M. Mezey, *New York University College of Nursing Hartford Institute, New York, New York*

Mounting evidence supports the premise that high total energy expenditure leads to greater longevity and that regular physical activity is associated with vitality. Physical activity should include aerobic activity, resistance exercise, balance, and flexibility exercises. Unfortunately, the majority of older adults do not engage in regular physical activity. This symposium will explore how creative exercise programs contribute to successful aging and what are the specific interventions that can be used to optimize adherence to regular physical activities over time. The Nursing Care of Older Adults Interest Group Symposium will: 1) Increase knowledge about the effects of exercise on physical and psychological well being for healthy aging; 2) Explore personal and organizational factors that promote or impede the implementation and sustainability of creative approaches to adherence to physical activity; and 3) Experience Tai Chi as a creative approach that contributes to aspects of healthy aging.

CREATIVE APPROACHES TO CHALLENGING PROBLEMS: USE OF THE SOCIAL ECOLOGICAL MODEL TO CHANGE BEHAVIOR AMONG OLDER ADULTS

B. Resnick, *University of Maryland School of Nursing, Baltimore, Maryland*

Changing behavior to optimize function and physical activity among older adults is challenging across all care settings. Challenges arise at the individual level as well as those that occur due to the facilities, systems, or communities in which they live. The social ecological model suggests that an individual's behavior is affected by a wide sphere of influences: intrapersonal, interpersonal, environmental, and policy, and the approach to changing behavior extends traditional motivational and behavioral theory to address all components that influence behavior. Multiple interventions have been developed using this model to change behavior of residents in long term care facilities, their direct care workers and nurses, and minority and low income older adults in the community. The Res-Care Intervention and the PRAISEDD Interventions are examples of interventions and will be described in detail to serve as guides for how such work can be developed and implemented in real world settings.

HEALTH BENEFITS OF TAI CHI FOR OLDER PERSONS

F. Li, *Oregon Research Institute, Eugene, Oregon*

As an alternative exercise, Tai Chi has drawn increasing research interest, with accumulating evidence showing the therapeutic value of Tai Chi on overall health and well-being for the elderly. Therefore, promoting Tai Chi as an exercise modality has considerable potential for

maintaining optimal physical and psychological function for older adults. The objectives of this presentation are to (a) summarize current research findings with a particular focus on geriatric populations, (b) discuss findings with respect to their practical implications, and (c) demonstrate an evidence-based Eight-Form Tai Chi routine.

SESSION 555 (POSTER)

WOMEN'S HEALTH - HS POSTER SESSION

RELATIONSHIPS BETWEEN HANDGRIP STRENGTH, FUNCTIONAL FITNESS, AND BODY COMPOSITION AMONG ELDER WOMEN

M. Tecmire, T. Lake, M. Powers, *University of Central Oklahoma, Edmond, Oklahoma*

Handgrip strength is often used to estimate total body strength, although it is unclear if this relationship extends to functional fitness and body composition. The primary purpose of this study was to explore the relationship between handgrip strength and functional fitness among older adults. A secondary focus of this study was to examine the relationships between handgrip strength and total body lean tissue mass (LTM), arm LTM, and leg LTM. The participants were women over the age of 75 ($n = 33$) who completed a session of Senior Fitness Testing along with an iDXA scan. Handgrip strength was assessed using a T.K.K. 5401 digital handgrip strength dynamometer. Functional fitness was assessed using the chair stand test and arm curl test, with LTM measurements coming from an iDXA total body scan. Data were analyzed using a Pearson's Product Moment Correlation Coefficient test. The results indicated a significant correlation between handgrip strength and the arm curl test ($r = .52, p = .00$) as well as hand grip strength and the chair stand test ($r = .45, p = .01$). The secondary focus suggested the strongest correlation between handgrip strength and arm LTM ($r = .63, p = .00$) although significant correlations were also found with total LTM and leg LTM ($p < .05$). These results support that handgrip strength is not only a fair indicator of functional fitness but also LTM.

FOOD INSECURITY AMONG OLDER WOMEN

L. Turner¹, L. Wallace², M. Umstatt¹, A. Gaines¹, *1. Health Science, The University of Alabama, Tuscaloosa, Alabama, 2. The University of Tennessee, Knoxville, Tennessee*

Background: Food insecurity (lacking or uncertain access to adequate food by socially acceptable means) is experienced by older women more than others. Food insecure vulnerable women suffer from chronic health problems, poor nutritional status and functional decline at rates disproportionate to the general population. Food insecurity among older women has not received adequate research attention. Purpose: The purpose of this study was to examine factors and outcomes associated with food insecurity in community-living older women, and to explore potential strategies for enhancing food security and nutritional status among older women. Methods: A literature search was conducted using PubMed and the terms aging, elderly, older women, food security, nutrition, and poverty as keywords. The search was limited to peer-reviewed publications, both books and journal articles. Results: Addressing the harmful effects of this complex problem is challenging. Current assistance programs have limitations including insufficient funding. Older women may be eligible for, but not participate in, some programs. This is due to being unaware about the existence of programs, perceiving that they are not eligible, having lack of access, experiencing feelings of embarrassment, and perceiving a distain for relying on the government. Conclusions: Enhancing food security includes reaching out to older women in efforts to increase participation in effective food distribution programs. Making sure older women are informed regarding existing programs and developing accessible and convenient places for program delivery may enhance utilization. Strategies should emphasize

physical access to nutritious foods while maintaining dignity in food dissemination.

SESSION 560 (SYMPOSIUM)

ADVANCING NURSING HOME EXCELLENCE: A COLLABORATIVE FORMULA THAT WORKS

Chair: D. Bakerjian, *School of Nursing, University of California, San Francisco, Novato, California*

Discussant: C. Gunther-Murphey, *Institute of Healthcare Improvement, Cambridge, Massachusetts*

The Advancing Excellence in America's Nursing Homes Campaign (Campaign) was started in October 2006 by a broad coalition of nursing home stakeholders as a unique effort to help nursing homes improve quality of care and life for our nation's nursing home residents. The Campaign includes representatives from nursing home associations, government agencies, advocacy organizations, foundations and professional organizations. This strategic partnership guided the Campaign to establish eight measureable goals to improve nursing home outcomes in four clinical and four operational areas. These goals were selected based on Centers for Medicare and Medicaid Services work in the National Nursing Home Quality Initiative. The Campaign fostered the formation of statewide coalitions, also called Local Area Networks of Excellence (LANEs), in 49 states to provide the local infrastructure to support the national Campaign. Through regular communications, an emphasis on quality improvement and evidenced-based technical assistance tools, the Campaign has demonstrated significant success in the selected clinical outcomes. This presentation will discuss the innovative structure of the Campaign and its emphasis on the importance of coalitions and public and private partnerships. During the presentation, national data will be presented that demonstrate nursing home improvements over the initial two-year phase of the Campaign. Based on extensive evaluation of these results, the Campaign revised and updated the goals for the second phase. A state case study will be used to demonstrate AE implementation and to illustrate use of evidence-based care tools that were developed by the Campaign.

AN OVERVIEW OF ADVANCING EXCELLENCE IN AMERICA'S NURSING HOMES: A COLLABORATIVE FORMULA THAT WORKS

M. Koren¹, D. Bakerjian², *1. The Commonwealth Fund, New York, New York, 2. School of Nursing, University of California, San Francisco, Novato, California*

The Advancing Excellence in America's Nursing Home campaign consists of a coalition of stakeholder groups representing for profit and not for profit nursing home provider associations, consumer advocacy groups, foundations, healthcare professional organizations, and government agencies included the Centers for Medicare and Medicaid Services. This innovative and growing all-volunteer coalition has met monthly for over three years to collaboratively tackle quality of care and quality of life challenges for both residents in and workers of America's nursing homes. The broad stakeholder-based volunteer-driven nature of the campaign has had several remarkable outcomes attributed to it. The unique structure of the steering committee involves all members of the steering committee with equal voices to discuss issues and solutions to common problems for common goals. This structure and process has facilitated quality improvements in the industry by expanding understanding, changing attitudes and integrating differing positions of the committee members.

STRONG STATEWIDE COALITIONS WITH NATIONAL SUPPORT PROVIDE EFFECTIVE ENVIRONMENT FOR NURSING HOME QUALITY IMPROVEMENT

C. Benner, *American Association of Homes and Services for the Aging, Washington, District of Columbia*

The Advancing Excellence in America's Nursing Homes Campaign brings together, and keeps together, nursing home stakeholders with various backgrounds and frequently disparate perspectives. For the first time, government, provider organizations and advocacy organizations have consolidated efforts to improve quality in the nursing home. The national Coalition has translated this foundation and principal of strong partnerships into a national learning community of Local Area Networks of Excellence (LANEs) in 49 states. These statewide organizations of nursing home stakeholders have created a positive synergy and environment for change and sharing of best practices. The national Campaign provides regularly updated evidence-based technical assistance materials and other communications to support, encourage and promote the work of the LANEs. This presentation explores core characteristics of the LANEs and describes key components that promote and increase effectiveness.

EFFECTIVE ARKANSAS PARTNERSHIPS LEAD TO POSITIVE TREND IN NURSING HOME QUALITY OUTCOMES

C.J. Beverly, *Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The Arkansas Coalition for Nursing Home Excellence (ACNHE) leads the implementation of the Advancing Excellence Campaign in Arkansas. The ACNHE was established in 2005 to bring stakeholders together from government agencies, academia, professional and quality improvement organizations for the purpose of improving quality of care in nursing homes in the state. Led by the Arkansas John A. Hartford Center of Nursing Excellence, this partnership was awarded Civil Money Penalty approved by the Arkansas State Legislature to support the work of the ACNHE. This presentation will describe the activities of the ACNHE with respect to implementation of the activities of the Advancing Excellence Campaign and provide results of work from 2007-2009 in selected clinical goals and one operational goal as defined by the Campaign. Critical processes germane to successful change in quality outcomes will be examined

KNOW YOUR NUMBER, SET YOUR TARGET!

S. Gravenstein^{1,2}, D. Bakerjian⁴, R. Baier^{1,2}, C. Benner⁶, C.J. Beverly³, M. Koren⁵, 1. *Quality Partners of Rhode Island, Alpert Medical School of Brown University, Providence, Rhode Island*, 2. *Quality Partners of Rhode Island, Providence, Rhode Island*, 3. *University of Arkansas for Medical Sciences, Little Rock, Arkansas*, 4. *University of California, San Francisco, California*, 5. *Commonwealth Fund, New York, New York*, 6. *American Association of Homes and Services for the Aging, Washington, District of Columbia*

Nursing home staff signing on to join the Advancing Excellence Campaign had to select three goals from one or more of four clinical and four operational goals. For the clinical goals selected, they were also offered the opportunity to set a target. The Centers for Medicare and Medicaid Services collects data on these clinical goals, allowing us to track progress over the ensuing two years. We compared facilities that did not join the Campaign to facilities that joined but did not set a target for improvement for their goals, and facilities that joined and set targets. Each experienced progressively greater improvement, but those facilities that set targets and joined the campaign had the greatest improvement with fewer pressure ulcers, restraints used, and fewer reports of moderate to severe pain. Greater quality improvement can be realized through evidence-based care and data-driven decisions, including through target setting and with national infrastructure support.

IMPROVING QUALITY IN NURSING HOMES THROUGH NATIONAL TARGET SETTING

D. Bakerjian^{1,3}, C. Benner⁶, S. Gravenstein^{4,5}, C.J. Beverly⁷, M. Koren², 1. *University of California, San Francisco, San Francisco, California*, 2. *The Commonwealth Fund, New York, New York*, 3. *Gerontological Advanced Practice Nurses Association, Pensacola, Florida*, 4. *Quality Partners of Rhode Island, Providence, Rhode Island*, 5. *Brown University, Providence, Rhode Island*, 6. *AAHSA, Washington, District of Columbia*, 7. *University of Arkansas, Little Rock, Arkansas*

Advancing Excellence in America's Nursing Home started the first phase of the Campaign with four clinical and four organizational goals. Based on measured improvements in nursing homes and lessons learned in the first two years, the steering committee assembled a Goals Task Force (GTF) to revise and update the goals for the next phase of the Campaign. The GTF, comprised of a multidisciplinary group of representatives from the steering committee, met regularly over several months to develop new and revised goals for phase two of the Campaign. We used the Achievable Benchmarks of Care, Undesirable Benchmarks of Care and the improvement trends experienced from the first phase of the Campaign to set national targets for each goal. Similar to target setting at the facility level, this measurable process contributes validity to the targeted objectives set by the Campaign.

SESSION 565 (SYMPOSIUM)

AGING WITH A DISABILITY: OPTIMIZING ABILITY AND PARTICIPATION THROUGH TECHNOLOGY AND LIFESTYLE

Chair: E. Crimmins, *University of Southern California, Los Angeles, California*

Discussant: M.L. Campbell, *The National Institute on Disability and Rehabilitation Research, Washington, District of Columbia*

Technological developments can enhance the lives of individuals aging with and into disability. This symposium provides three examples of the use of cutting-edge technology and lifestyle redesign to promote rehabilitation of motor processes that facilitate functional performance, and prevent development of secondary consequences of immobility. These projects join multiple disciplines under the auspices of a Rehabilitation Engineering Research Center for Technologies for Successful Aging with Disability to develop technology to delay, prevent, and diminish the disability linked to a number of important conditions related to aging. The Virtual Reality and Gaming for Home-Based Motor Assessment and Training Project has developed low cost, home-based Virtual Reality toolkits for motor assessment and rehabilitation. Examples of the use of this technology to improve and maintain balance will be demonstrated. The Neuromuscular Electrical Stimulation for Mobility Project has developed implantable wireless micro-stimulators to prevent recurrences of debilitating pressure ulcers among persons using wheelchairs. Results from applications of this technology with patients will be shown. Research results from the Pressure Ulcer Prevention Study will clarify the importance of understanding the lifestyle factors affecting the development of pressure ulcers. This study is a randomized control trial with an intervention, developed to encourage participants to take a variety of health-promoting measures to prevent pressure ulcer formation. These projects demonstrate how advanced technologies and multidisciplinary interventions can increase functional ability and meaningful rehabilitation and promote successful aging.

BALANCE IN 'AGE' OF TECHNOLOGY: DEVELOPMENT OF VIRTUAL REALITY GAMING APPLICATIONS TO IMPROVE BALANCE

B. Lange, S. Flynn, A." Rizzo, *Institute for Creative Technologies, Marina Del Rey, California*

The recent release and world wide acceptance and enjoyment of Nintendo's WiiFit™ has provided significant evidence for the notion that

exercise can be fun, provided it is presented in a manner that is entertaining, motivating and distracting. The Nintendo WiiFit™ challenges balance and preliminary evidence suggests the device has potential to be used as a therapeutic tool. The Sony PlayStation EyeToy™ has demonstrated promising results as a low-cost tool for balance rehabilitation. This symposium will present an overview of the use of these off-the-shelf games for balance rehabilitation in a range of populations aging with and into a disability. The rationale for the use of games in rehabilitation will be presented and issues associated with the use of these games will also be discussed. Demonstrations of virtual reality and video game applications that have been specifically developed for rehabilitation will be presented, including preliminary usability data.

NEW TECHNOLOGIES IN LIFESTYLE INTERVENTION FOR DECREASING PRESSURE ULCER RISK

F. Clark, *Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, California*

Emerging technologies and innovative interventions are needed to address widening gaps in the quality and affordability of health care for individuals who are aging with disabilities. Adults with spinal cord injury (SCI) are particularly at increased risk to develop advanced stage pressure ulcers. Based on a NIDRR funded study of the contextual factors that lead to pressure ulcers in real life circumstances, our research group developed an innovative lifestyle-based pressure ulcer prevention program that incorporates online resources and the use of an interactive CD-ROM. Currently, through NIH funding we are conducting a randomized clinical trial to investigate the intervention's ability to prevent pressure ulcers and related surgeries, generate health care cost savings, and enhance quality of life. In this presentation, we will emphasize the blueprint for intervention manualization and the creative technologies that the intervention incorporates.

PRESSURE ULCER PREVENTIONS USING IMPLANTED ELECTRICAL STIMULATORS

H. Kaplan, L. Baker, G. Loeb, F. Richmond, *University of Southern California, Los Angeles, California*

Pressure ulcers in persons who sit for long periods of time, especially in the absence of sensation, are relatively common and uniformly catastrophic to participation in society. Presently, seated individuals are required to use cognitive strategies because 'automatic weight shifting' is not automatic in the presence of decreased of sensation and/or limited motor function. A preliminary study of three individuals undergoing gluteal rotation flap surgery to correct chronic pressure ulcers is reported here. Two individuals successfully completed the one year program of stimulation for muscle bulking. One year follow-up of these patients, both over the age of forty, showed improved skin quality as measured by the Braden Scale and reperfusion times, and improved average pressure distribution when measured through pressure mapping. These promising outcomes have lead to further evaluation of the implanted systems for long term management of individuals who are at a high risk for developing pressure ulcers.

SESSION 570 (SYMPOSIUM)

BUILDING HEALTHY COMMUNITIES FOR ACTIVE AGING — THE EXPERIENCE

Chair: K.E. Sykes, *OCHPEE, US EPA, Washington, DC, District of Columbia*

Discussant: L.W. Kaye, *U of Maine, Center on Aging, Bangor, Maine*

Place matters and community matters for our health and our well-being. Designing communities that promote active living is a public health strategy that is easier to identify than to implement. Results from CDC research will be presented on evidence of environmental and policy approaches to promote physical activity in terms of community-scale and street-scale urban design, and on the planning and design issues

facing communities today. The Atlanta Regional Commission (ARC) developed a health and wellness plan to meet the needs of its rapidly aging population. ARC will discuss its framework and early results from a 9-day charrette. Small towns and rural areas face significant challenges in building healthy communities for active aging especially for older adults with functional limitations. This presentation will provide a conceptual approach to building healthy non-metropolitan communities. It will draw upon work of the Healthy Aging Research Network, the UNC Highway Safety Research Center and community partners. Key topics include framing the issues, assessment, community collaboration and strategies for environmental and policy change. The Maine Senior Environmental Leadership Corps provides leadership and civic engagement training with a special focus on rural environmental stewardship and smart growth planning for older adults in the state of Maine. Examples of customized, community setting-specific, delegate action plans will be presented and measurable criteria for assessing and evaluating program effectiveness and impact offered. Finally, case studies of communities who have been recognized by EPA thru an awards program "Building Healthy Communities for Active Aging" will show how change can happen.

OVERCOMING CHALLENGES TO ACTIVE AGING IN RURAL AND SMALL TOWN AMERICA

R. Hunter¹, J. Sharkey³, L.L. Bryant², W.W. Hunter⁴, M. Skeele⁵, 1. *UNC Center for Aging and Health, Chapel Hill, North Carolina*, 2. *University of Colorado, Denver, Colorado*, 3. *Texas A&M University, College Station, Texas*, 4. *UNC Highway Safety Research Center, Chapel Hill, North Carolina*, 5. *Council on Aging for Henderson County, Hendersonville, North Carolina*

Objective: Describe a conceptual framework and strategies to foster active aging in small towns and rural communities Small towns and rural areas face significant challenges in building healthy communities for active aging. As compared with metropolitan areas, these communities typically have fewer transportation resources, relatively greater distances to traverse, aging or minimal pedestrian infrastructure, and in some instances, environmental hazards from agricultural or industrial applications. These challenges are especially problematic for older adults with functional limitations. To address the challenges successfully requires somewhat different approaches than those employed in urban settings. This presentation will include a conceptual approach to building healthy non-metropolitan communities. It will draw upon lessons learned from the work of the Healthy Aging Research Network, the UNC Highway Safety Research Center and community partners. Key topics include framing the issues, assessment, community collaboration and strategies for environmental and policy change.

TRAINING OLDER ADULTS TO SERVE AS LOCAL RURAL LEADERS IN SMART AND GREEN GROWTH PLANNING

L.W. Kaye, J. Crittenden, *Center on Aging, University of Maine, Bangor, Maine*

The Maine Senior Environmental Leadership Corps provides leadership and civic engagement training with a special focus on environmental stewardship and smart growth planning for older adults. This unique initiative entails the nomination of individuals 50 years and older to serve as delegates to local and state governments and community organizations. More than 150 indigenous delegates participate in an intensive skills building and leadership development summit on environmental planning. The project is charged with: 1) maximizing citizen participation in local, county, and state planning; 2) raising awareness of the link between the built environment and public health; 3) reducing environmental impacts of rural development; and 4) increasing the number of smart growth planning activities statewide. Examples of customized, community setting-specific, delegate action plans will be presented along with measurable criteria for assessing and eval-

uating program effectiveness and impact. This project is supported by a grant from the U.S. EPA Aging Initiative.

HEALTHY OLDER ADULTS IN HEALTHY COMMUNITY ENVIRONMENTS

J. Kruger, *PAHB, CDC, Atlanta, Georgia*

Community design can support or discourage physical activity and there is growing evidence showing access to parks and recreation facilities have beneficial effects of physical activity. Data from the Trust for Public Land shows that on average there are 4 parks per 10,000 residents, and 1 recreation facility per 20,000 residents. Designing communities that promote active living is a public health strategy that is easier to identify than to implement. This session will present evidence of environmental and policy approaches to promote physical activity in terms of community-scale and street-scale urban design, and on the planning and design issues facing communities today

BUILDING HEALTHY COMMUNITIES FOR ACTIVE AGING AWARD PROGRAM: LEADING BY EXAMPLE

K.E. Sykes, *OCHPEE, US EPA, Washington, DC, District of Columbia*

Aging today is about more than medical care. Social and environmental factors significantly affect health such as housing, transportation, and access to evidence-based health promotion programs and opportunities for healthy living. Communities built for healthy aging throughout our lives are characterized by development patterns that emphasize ease of getting around, with convenient housing options, abundant walking and biking paths, and green space to create an attractive environment. EPA and its partners including CDC, the NCOA, the National Blueprint and others, recognize communities that demonstrate excellence in "Building Healthy Communities for Active Aging." ate the best and most inclusive approach to implementing Smart Growth and Active Aging at the neighborhood and county levels. Portland, OR a recent award winner's achievements will be described on how they are meeting the needs of elders and the changes they have made to the built environment to promote active aging and walkable communities.

SESSION 575 (SYMPOSIUM)

CREATIVE APPROACHES TO THE STUDY OF SPIRITUALITY IN LATER LIFE

Chair: *M. Brennan, Center on HIV and Aging, AIDS Community Research Initiative of America, New York, New York*

Discussant: *R.C. Atchley, Naropa University, Boulder, Colorado*

In recent years, gerontologists have begun to study both creativity and spirituality, but rarely have they addressed the connections between these phenomena. Both draw on the inner, nonverbal, and holistic aspects of the human psyche and rely on the language of symbol and metaphor rather than logical expressions of human reason. Both spirituality and creative activity can infuse the lives of older adults with a sense of purpose and meaning as they face the developmental tasks of growing older. The presentations in this session will address the connections between the creative and the spiritual in older adults by showing how creativity can be a pathway to spirituality and by examining how openness to spirituality can nurture creativity. The first presenter will describe the advantages and disadvantages of using film documentaries to capture the holistic and humanistic aspects of aging and spirituality. Our second presentation will describe qualitative research examining connections between spirituality and cognition, as well as the inter-connectedness of spirituality, cognition and creative activity in older adults. Next we will explore how creative expression through the arts reveals spiritual intelligence among older adults living with dementia. The final paper will describe how older adults can strengthen their spiritual connections through the creation of "dooryard gardens" giving them a heightened awareness of the natural world. The discussion will focus on the implications of this work for practice and research.

AGING AND SPIRITUALITY: PRODUCTION OF DOCUMENTARY FILMS

M. Takahashi, *Northeastern Illinois University, Chicago, Illinois*

Documenting spiritual experience requires techniques that capture the highly visual aspects of spirituality: ceremonies, customs, artifacts, clothing, etc. One such technique is film and video. Although for many years social scientists have used visual images as scientific data in an effort to establish facts about psychological and/or social phenomena, there has been the development of a new trend that uses visual documentation as an end in and of itself. This approach portrays human experience through holistic and humanistic film narratives. By incorporating a short clip from one of my previous cross-cultural work on longevity and spirituality in Okinawa, I will present pros and cons of using visual documentation in terms of the following dimensions: funding sources, grant proposal requirements, human resources, technical expertise, ethical guidelines, post production, and the final products (publication vs. distribution).

'IT'S A BLESSING TO BE SHARP' CREATIVE EXPRESSIONS OF SPIRITUALITY AND COGNITIVE HEALTH

S.B. Laditka¹, M. Brennan⁵, J.N. Laditka¹, D.B. Friedman², D.J. Fetterman³, R. Liu², S.L. Ivey⁴, L.L. Bryant⁶, 1. *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*, 2. *University of South Carolina, Columbia, South Carolina*, 3. *University of Pittsburgh, Pittsburgh, Pennsylvania*, 4. *University of California at Berkeley, Berkeley, California*, 5. *ACRIA, New York, New York*, 6. *University of Colorado, Denver, Colorado*

Spirituality may play a role in successful aging. We studied diverse older adults' perceptions about spirituality in the context of cognitive health and health behaviors, with thematic analysis of 53 focus groups (n=450, mean age=78) representing African Americans, Native Americans, Chinese Americans, Latinos, Vietnamese Americans, and non-Hispanic whites. Receiving support and/or blessings from God were described more frequently by African Americans, Whites, and Vietnamese. Participants spoke of being inspired by those with faith, and of connections between faith and positive attitudes. Participants described the importance of spirituality and/or religion for cognitive well-being; activities included participating in church events, creative pursuits (e.g., church choir), teaching Sunday school, Bible study, and participating in church-sponsored social and health-promotion activities. Participants stressed the importance of churches for informing the public about behaviors associated with cognitive health, typically commenting, "churches are very powerful." Findings underscore the importance of spiritual and religious expression for cognitive health.

CREATIVE EXPRESSION REVEALS THE SPIRITUAL INTELLIGENCE OF PERSONS LIVING WITH DEMENTIA

S.H. McFadden, *Psychology, University of Wisconsin Oshkosh, Oshkosh, Wisconsin*

Emmons (1999) proposed five components of spiritual intelligence: capacity for transcendence, experience of heightened states of consciousness, sanctification of everyday experience, spiritual resources used for problem-solving, and virtuous behavior. "Intelligence" is a word rarely associated with persons living with dementia. However, observations of 12 one-hour sessions of an arts group involving 10 persons with advanced dementia revealed that in the process of making art together, they showed spiritual intelligence. A theoretical perspective on spirituality and creative expression that views both as fundamentally relational guides the interpretation of the observations. Applying Thomas Merton's metaphor of "seeds of contemplation" to creative expression programs for persons with advanced dementia enables us to see that through these activities, seeds of contemplation can be nurtured in persons with dementia as well as in staff members and volunteers. Examples of the art works created by members of the group will be shown and described.

THE GREENING OF CREATIVITY AND SPIRITUALITY IN 'DOORYARD' GARDENERS

S.A. Eisenhandler, *University of Connecticut, Waterbury, Connecticut*

Creativity finds expression in many aspects of social life. Gardening is a creative activity that offers greening or rejuvenation to gardeners [in the lingua franca of gardening, greening refers to the budding and renewal of plant life each spring]. Another derivative of gardening is heightened spirituality. For some gardeners a transcendent awareness is disclosed in a deeper sense of connection to the natural world or in a concern for the welfare proximate and distal others. Such awareness moves individuals beyond mere self-interest in the outcome of gardening, closer, if not precisely into the domain of gerotranscendence. Qualitative research [2005-2009] in a retirement community where residents have gardened for nearly seventeen years, establishes the empirical base for analysis of these relationships. Small spaces adjacent to front or back doors filled with plant life - dooryard gardens - provide much more than fragrant flowers and the freshest of vegetables; they renew the spirit.

SESSION 580 (SYMPOSIUM)

ESPO PRESIDENTIAL SYMPOSIUM - EARLY CAREER CHALLENGES: ISSUES AND PERSPECTIVES ON PROFESSIONAL CAREERS AND FAMILY PLANNING

Chair: *S.N. Munk, Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

Discussant: *S.N. Munk, Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

Membership in the Emerging Scholars and Professionals Organization (ESPO) within the Gerontological Society of America (GSA) tends to overlap with the stage of life that often includes life partner establishment (through marriage or other significant relationship commitments) and the expansion of family (through having, acquiring, or adopting children). Discussions regarding this topic typically focus on issues of balancing work/school and family while overlooking the planning and logistics involved in women and men beginning and adding to their families all while pursuing higher education, transitioning from student to career professional, or during their early professional career. This symposium seeks to begin a discussion regarding family planning issues and needs in relation to higher education completion and early career transitions and success. The four presentations within this symposium investigate family planning balanced with academia and career completion/planning through a series of lenses including traditional birth and adoption. In addition, the challenges of working abroad in relation to family planning will be presented along with current and anticipated family status and issues among ESPO members. The primary objective of this symposium is to identify and discuss family planning challenges faced by today's emerging scholars and professionals in the field of gerontology in order to better allow ESPO to develop pertinent programs, symposia, and interest groups to its members.

PRACTICAL LESSONS FROM NEW MOM, PH.D.: FROM COMMENCEMENT TO POST-DOC TO TENURE TRACK

H. Ewen, *Sociology and Gerontology, Miami University, Oxford, Ohio*

The decision to pursue a career in academia while also creating a family is a balancing act of emotion, finances, time, and patience. Women striving for a place in academia often feel the pressures of time—in completion of their degrees, the tenure clock, and their biological clocks. The focus of this presentation is to discuss the issues facing career women during times of professional transition, commencement through post-doctoral fellowships and the early stages on the tenure track while also navigating the early stages of parenthood. The session will include an overview of the job search process, issues with childcare and healthcare benefits, time management, and managing competing demands and emotions. The session will end with questions and discussion.

THE CHALLENGES OF AN INTERNATIONAL CAREER: CAN I MEET MY OWN CAREER AND PERSONAL ASPIRATIONS WHILE WORKING ABROAD?

K. Fitzgerald, *Swansea University, Swansea, United Kingdom*

Balancing family and career is difficult enough without adding the element of working abroad. This presentation is about the challenges of making the decision to work and live abroad early in your gerontological career. Meeting your personal goals and career aspirations while supporting your partner's needs and goals, determining if starting your own family while living abroad is feasible, and nurturing family ties with members in your home country make the decision to work abroad even more complex. Cultural differences, living standards, and distance to 'home' can make living abroad challenging but it can also be a very exciting adventure. Sacrifices may have to be made or plans put on hold, but working abroad can be a very rewarding experience that can make the delay in other parts of your life well worth the challenge.

CAREER AND FAMILY PLANNING: ESPO MEMBERS' PERSPECTIVES

K.B. Dassel, *Barrow Neurological Institute, Phoenix, Arizona*

Successful navigation through the labyrinth of graduate school, early career transitions, and family planning can be quite challenging for members of the Emerging Scholars and Professionals Organization (ESPO) section of GSA; a diverse group of students, post-docs, and young professionals. In order to better address the concerns and meet the educational, professional, and supportive needs of ESPO members in this area, it is imperative that we identify the specific challenges faced by our members as they endeavor to find balance between their personal and professional lives. Therefore, the purpose of this presentation is to present results from a survey completed by ESPO members regarding members' current and anticipated family composition as well as experienced impediments to their family and/or career development. This information will be utilized for the future development of interest groups, symposia, and mentorship opportunities for ESPO members with the goal of reducing stress during this life transition.

SESSION 585 (PAPER)

END OF LIFE CARE

MEDICATION USE BY COMMUNITY DWELLING MEDICARE BENEFICIARIES AT THE END OF LIFE

T. Shaffer^{1,3,2}, L. Simoni-Wastila^{2,3}, W. Toler², B. Stuart^{2,3}, J.A. Doshi⁴, 1. *University of Maryland, Doctoral Program in Gerontology, UMB/UMBC, Baltimore, Maryland*, 2. *University of Maryland, School of Pharmacy, Department of Pharmaceutical Health Services Research, Baltimore, Maryland*, 3. *University of Maryland, The Peter Lamy Center for Drug Therapy and Aging, Baltimore, Maryland*, 4. *University of Pennsylvania, School of Medicine, Leonard Davis Institute of Health Economics, Philadelphia, Pennsylvania*

Background: While numerous studies have examined the use of medical services at the end of life, much less is known about medication use at this stage of life, and virtually nothing has been quantified. Frameworks for medication use during the end of life are only now starting to be formulated and described. Objectives: To describe the use of select palliative and chronic medications for aged Medicare beneficiaries stratified by probability of death. Participants: Community-dwelling fee-for-service Medicare beneficiaries aged 65 years or older (N=41,493) and a subset of beneficiaries with malignant cancer (ICD-9-CM 140.xx-208.xx, N=1,532) drawn from the Medicare Current Beneficiary Surveys (2000 – 2005). Methods: Probability of death was modeled using a logistic regression and beneficiaries were stratified into 5 groups by predicted probabilities (<5%, 5-10%, 10-20%, 20-30%, >30%). Prevalence and use of palliative and chronic medications were calculated for each group. Results: Utilization of palliative care medications increased

with predicted probability of death. For chronic medications, use of osteoporotics and statins declined as probability of death increased, however, rates of use were still high among those with the highest probability of death, and mean fills per month remained relatively constant across all beneficiary groups. Conclusion: Increased use of palliative medications as death becomes more probable was expected and is consistent with new medication guidelines for dying individuals. For select chronic medications where time-to-benefit exceeds life expectancy, their continued use could be re-considered as long as therapeutic aims are not compromised.

BENEFITS AND CHALLENGES IN USE OF A STANDARDIZED SYMPTOM ASSESSMENT INSTRUMENT IN HOSPICE

D.J. Schulman-Green¹, E. Cherlin², R. McCorkle¹, M.D. Carlson³, M. Hennessy², R. Johnson-Hurzel⁴, E. Bradley², *1. Yale University School of Nursing, New Haven, Connecticut, 2. Yale University School of Public Health, New Haven, Connecticut, 3. Mount Sinai School of Medicine, New York, New York, 4. The Connecticut Hospice and John D. Thompson Institute for Education, Training and Research, Inc., Branford, Connecticut*

Hospices are now mandated to perform routine quality assessment under the final Medicare Hospice Conditions of Participation, calling for standardized approaches to monitoring hospice quality. How will hospices, which are rooted in individualized care, implement standardized quality monitoring systems? We report hospice staff experiences using a standardized symptom assessment instrument, the Edmonton Symptom Assessment System (ESAS), to monitor hospice quality. The ESAS illustrates the benefits and challenges arising with standardized symptom assessment for quality monitoring in the hospice setting. We conducted in-depth telephone interviews with 24 individuals representing 9 hospices involved with the National Association for Home Care & Hospice Quality Assessment and Performance Improvement Collaborative, which pilot tested the ESAS for quality assessment. Transcripts were analyzed using the constant comparative method. Participants reported benefits and challenges with the ESAS. Benefits were that the ESAS was a brief and easy tool that identified areas of concern, engaged patients in symptom assessments, and monitored symptom changes over time. In addition, the ESAS was viewed as a useful teaching tool for less experienced staff. Challenges included lack of clarity about inclusion rules and frequency of assessments; difficulty interpreting the numeric symptom rating scale, difficulty incorporating patient preferences with symptoms, and a sense that the use of standard assessment instruments was "unnatural." Recommendations to promote effective use of the ESAS for quality monitoring of hospice care include standardizing implementation procedures, modifying the ESAS to capture patients' preferences for addressing symptoms, and staff education to enhance comfort levels with the instrument before implementing widely.

END OF LIFE CARE AND DEATH RITUALS: A COMPARISON OF HINDU AND MUSLIM CULTURAL BELIEFS

R. Gupta, *School of Social Work, San Francisco State University, San Francisco, CA, California*

The purpose of this study is to examine Hindu and Muslim cultural beliefs as related to end of life care and death rituals. The population of Hindus and Muslims worldwide has grown in large proportions, and especially in the United States. For example there are about 2 million Hindus and 7 million Muslim Americans in North America. A large proportion of this population is the baby boom generation that is aging and requiring end of life care. However research on end of life care is limited to the majority population or ethnic minorities. Service providers are often faced with the challenge of not having enough knowledge about end of life care for Hindu and Muslim Americans. This study was con-

ducted using four focus groups with 8-10 participants. Focus groups comprised of Hindu population at 3 different stages of life: a) older adults who had immigrated to the US after retirement; b) middle aged immigrated in young adulthood; c) US born young adults. Muslim sample consisted of a focus group of ten middle aged immigrants. The data was tape recorded and transcribed and coded by two independent reviewers. Five themes emerged from data reveal variations in end of life care and death rituals by cultural group and by length of time in the US. The themes are related to meaning of death, and disposal of the body. Other themes are related to after death rituals, organ donation; and prolongation of life that vary between the cultural groups and by cohort. US born Hindus were closer in the adherence to Judeo-Christian beliefs compared to other groups. Results suggest some similarities and differences among these groups.

RECOGNIZING AND SUPPORTING LOSS: OLDER ADULTS WITH DEVELOPMENTAL DISABILITIES

M. Clute, *1. Social Work, Eastern Washington University, Cheney, Washington, 2. Hospice of Spokane, Spokane, Washington*

As life spans increase for adults with developmental disabilities (DD), they experience more loss and bereavement events. Adult children with DD are now outliving their parents (Ansello, 1992; Seltzer, Greenburg, Krauss & Hong, 1997). Paid staff, practitioners and families are expected to prepare, support and sometimes counsel these adults. Practitioners, especially grief counselors, are finding it critical for them to understand best practice principles for working with bereaved adults with DD. Limited information is available for families, support staff and counselors. The focus of this session is to first help participants understand the experience of grief for older adults with DD. Comparisons of the grief experience will be made between the older adult with DD and those without disabilities. Second, the presenter will review effective interventions with adults with DD reported in the literature. Two levels of intervention, informal and formal support are discussed. Effective interventions for bereaved adults with DD exist at both the informal and formal levels. They include: acknowledgement of loss, supportive listening, and involvement in ritual, memorialization, bibliotherapy, addressing spiritual beliefs, life story work, and varied concrete activities. At the level of formal intervention, counselors may build on these techniques, and then may focus on attachment work, coping mechanisms, and guidance and education of home staff, as well as coordination with home staff. Third, suggestions will be made for interventions with older adults with DD, based on the presenter's own research and practice. Existing resources will be shared and examples provided.

HOSPICE RESIDENCE: AN UNDERSTUDIED AREA OF HOSPICE RESEARCH

K. Chung, E.L. Essex, L.F. Samson, *Governors State University, University Park, Illinois*

A hospice residence (HR), a home-like setting where hospice staff provides hospice care 24 hours 7 days, has become an increasingly popular alternative to those who cannot afford to die at their own home. However, the availability of HR is likely to vary by state. Some states have not yet enacted any legislation authorizing HR. We hypothesize that the variation in the availability of HR reflects state HR policies. Selecting five states that allow hospice residence (New York, Wisconsin, North Carolina, Florida and California) and reviewing their laws and regulations, we identified a wide variability in the following policies: 1) permission to convert bed use; 2) room and board payment for Medicaid eligibles; 3) restriction to resident eligibility, geographical area of patient residence and the number of beds allowed to an HR. New York is the only state that provides financial assistance to Medicaid eligibles. North Carolina and Florida have a formal Certificate of Need law of regulating the number of beds allowed to HR. North Carolina allow residential beds only that are paid at the routine care rate; other states permit an HR to convert beds from residential use to inpatient

care use for the provision of general acute care; yet Florida allow dual beds that are licensed for the provision of both acute and routine (residential) care. Among other policies, the ability of an HR to provide all levels of care within the same walls appears to affect HR availability to state residents.

SESSION 590 (SYMPOSIUM)

LONG-TERM CARE RESEARCH AND POLICY IN THE 21ST CENTURY

Chair: L. Polivka, *Florida Policy Exchange Center on Aging, Tampa, Florida*

Discussant: S. Reinhard, *AARP, Washington, District of Columbia*

The body of long-term care research has grown steadily for the last 20 years. Much of this research has focused on the relative effectiveness of home- and community-based programs in meeting the needs of seriously impaired persons in reducing the use of nursing home care. This session will include three presentations providing summary assessments of research findings regarding the capacity of community-based care to provide comprehensive long-term care and the implication of these findings for the future of LTC policy and practice. The three presentations will focus on different dimensions of community-based vs. institutional LTC issues beginning with a review of several years' worth of data demonstrating the capacity of community-based care to contain LTC costs over the long-term. The second presentation will focus on the organizational factors that appear to be most critical in determining a state's ability to create a more balanced LTC system featuring an expansive array of community-based programs. The third presentation will provide the findings on the relative cost-effectiveness of several home- and community-based programs in a single state over a period of eight years. The panel will also include two discussants with extensive backgrounds in long-term care research, policy analysis, and implementation.

THE RELATIVE COST-EFFECTIVENESS OF HOME- AND COMMUNITY-BASED PROGRAMS IN FLORIDA

L. Polivka, *Florida Policy Exchange Center on Aging, Tampa, Florida*

The Florida Policy Exchange Center on Aging has conducted comparative cost-effectiveness studies of the state's major HCBS programs on an annual basis since 2003. This research is methodologically unique in that it is based on the linkage of Medicaid claims and Department of Elder Affairs client assessment data, which allows researchers to control for a wide range of client and service variables in measuring comparative program outcomes. The results across four studies have remained stable, in terms of the relative cost-effectiveness of each of the five programs. The presentation will conclude with discussion of how the stability of these findings enhance their value in shaping long-term care policy, especially in terms of for-profit HMO-organized LTC vs. non-profit aging network administered LTC.

DO HOME- AND COMMUNITY-BASED LTC PROGRAMS INCREASED CHOICE AND CONTAIN COSTS IN STATE LTC PROGRAMS

C. Harrington, *University of California, San Francisco, California*

Home- and community-based care has increased at a much slower rate for the impaired elderly than for the developmentally disabled population over the last 20 years. By 2008, a relatively small, but growing, number of states are now serving more impaired elderly in community-based programs than in nursing homes, but most states were still spending over 70 percent of their public LTC dollars on nursing home care. What do we now know about the capacity of community-based programs to substitute for institutional care of the impaired elderly and to increase the cost-effectiveness of state LTC systems? This presentation will use spending data collected from states to show that the expansion of community-based programs does appear to contain LTC costs fol-

lowing an initial increase in spending required to establish a sufficient infrastructure of community-based care that can serve as an alternative to nursing home care.

RESEARCH AND POLICY IN THE AGING NETWORK

R. Browdie, *Benjamin Rose Institute, Cleveland, Ohio*

This presentation will discuss the policy implications of what we now know about the cost-effectiveness of home- and community-based LTC services for the future of the non-profit aging network, which has provided the bulk of publicly funded community care for 25 years. The presentation will describe how these research findings can be used to formulate national performance standards for the aging network organizations as part of a comprehensive reform effort to create balanced LTC systems in all the states and improve the overall quality of LTC services.

STRATEGIES THAT PERMIT STATES TO RE-DIRECT THEIR LONG-TERMS CARE SYSTEMS TO COMMUNITY CARE

R.A. Kane, *Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota*

States and the federal government have become increasingly interested in creating a better balance in their LTC systems by expanding community-based programs and reducing their reliance on nursing home care. This presentation addresses the at organizational/administrative factors that seem to be most important in permitting states to make substantial progress in achieving balanced LTC systems. The presentation is based on findings from repeated in-depth case studies of LTC systems in 8 states and cross-cutting topical studies across those states. The research presented dealt with all populations served under Medicaid; this presentation concentrates on seniors and illustrates that effective strategies for seniors can be derived from principles developed for and by persons with physical or developmental disability. The future of the nursing home in a rebalanced system is discussed as is the challenge of making sure that community residential settings do not themselves become institutional in nature.

SESSION 595 (POSTER)

MINORITY AND DIVERSE POPULATIONS

LGBT ELDERS AND SENIOR SERVICES: ARE WE EQUIPPED TO MEET THE NEEDS OF THIS UNIQUE POPULATION?

A.M. Fosnacht, *School of Public Health, University of Illinois, Chicago, Illinois*

Background: There may be 2–6 million older LGBT adults by 2030 who have unique needs related to social support, informal care, stigmatization, and homophobia. Existing services may be inadequate in recognizing and meeting their needs. Purpose: This is an exploration of the extent to which professionals at senior-service organizations report the existence of policies supporting older LGBT clients and to examine differences in terms of facility type, religious affiliation, and payment sources. Methods: Howard Brown Health Center of Chicago conducted a survey among professionals in aging services who attended a meeting by the Chicago Department on Aging in November 2007. This dataset was analyzed (N=69) to address the research questions above, focusing on the existence of eight specific policies/programs. Results: Respondents reported an average of 2.8 LGBT-sensitive policies. The most prevalent was the inclusion of nondiscriminatory written policy. The least was required employee training. Religious organizations were 1.81 times more likely to report the existence of policies/programs (.64 - 2.8). Medicaid-accepting/free service providers were 1.96 times more likely to report the existence of policies/programs (.76 - 3.78). Social service organizations were more likely to report policies (44%) than medical facilities (33%), home health agencies (33%), elder service manag-

ing/marketing businesses (consulting) (25%), and living communities (11%). Discussion: Results suggest need for development of LGBT-sensitive policies. The most commonly reported policies do not include staff training or LGBT-specific programs. We should be concerned about the lack of LGBT-sensitive policies in living communities, among non-religious organizations and among private pay organizations.

USE OF RESTRAINTS ON OLDER PATIENTS WITH DEMENTIA: REPORTS FROM NURSES AND NURSING ASSISTANTS IN HONG KONG

E. Yan¹, T. Kwok², 1. *Social Work and Social Administration, University of Hong Kong, Hong Kong SAR, China*, 2. *The Chinese University of Hong Kong, Hong Kong SAR, China*

Physical Restraint is a Common Method of Behavior Control in Elder Care. The Most Frequently Cited Reason for the Use of Restraint is to Protect the Safety of Older Persons. However, there is Ample Evidence that the Use of Restraint is Not Only Ineffective in Achieving this Goal but Also Causes a Great Deal of Physical and Psychological Suffering. This Study Examines the Prevalence and Correlates of the Use of Restraint on Older Patients with Dementia in the Hospital Setting in Hong Kong. A Total of 187 Nursing Staff was Recruited through Convenient Sampling. Participants Provided Information on their Demographic Characteristics, Coworker Emotional Support, Burnout Symptoms, Attitudes toward Patients with Dementia, and their Experience of Restraint Use in Dementia Care. Results Showed that Restraint Use is Common among Nurses in Hospital Medical Wards in Hong Kong - More than Two-Thirds (69%) of the Participants Reported Using Physical Restraint in the Past 3 Months. Pearson Correlation Analysis Results Show that Use of Physical Restraint was Negatively Correlated with the Age of Participants ($r = -.44, p < .01$) and Coworker Emotional Support ($r = -.20, p < .05$), but Positively Correlated with Emotional Exhaustion ($r = .21, p < .01$). Attitudes towards Patients with Dementia, Depersonalization and Lack of Personal Achievement were Not Related to Restraint Use ($p > .05$). To Reduce the Use of Restraint in Dementia Care, We Should Cultivate a Supportive Environment and Reduce Job Stress among Nursing Staff.

"QUITE FRANKLY, I HAVE DOUBTS ABOUT REMAINING": HEALTH AND SUPPORT CONCERNS OF RURAL OLDER GLB ADULTS

S.D. King, H. Dabelko-Schoeny, *Social Work, Ohio State University, Columbus, Ohio*

For older adults living in rural communities, the ability to age-in-place is influenced by one's physical health status and access to both formal and informal support. Aging-in-place supports individual choice and autonomy and is often fiscally prudent. This study used a qualitative approach to explore health care service utilization and social support networks of 20 older gay, lesbian, and bi-sexual participants living in rural communities. The ages of the participants ranged from 40 to 68. There were 3 lesbians, 15 gays, 1 bi-sexual man and 1 bi-sexual woman from 13 states. Fifteen of the participants had several chronic health conditions. Themes emerging from this study included transportation difficulties to receive care, lack of choices for care, affordability of care, and the lack of connection and sense of belonging to a community. Ten participants did not have family they could depend upon for support, nine did not have friends who they could depend upon for support, and five indicated they did not have either for support. Seven of the participants had not disclosed their sexual identity to their health care providers. The lack of inclusion within the community, along with the lack of support options was a concern to be able to age-in-place. This presentation will outline several important factors health care service providers should be aware of when working with this population and areas where further research is needed to better understand the obstacles that effect aging-in-place for older gay, lesbian and bi-sexual individuals living in rural communities.

HEALTH STATUS, HEALTH INSURANCE AND SERVICE UTILIZATION PATTERNS AMONG CHINESE, FILIPINO, ASIAN INDIAN, AND OTHER ASIAN/PACIFIC ISLANDER OLDER ADULTS IN THE UNITED STATES

J. Tan, *Washington University in St. Louis, Saint Louis, Missouri*

Purpose of the study This study examined the health status, health insurance, and health service utilization patterns of US Chinese, Filipino, Asian Indian, other Asian/Pacific Islander (API), and non-Hispanic white older adults by using nationally representative data. Design and Methods Aggregated data file from the National Health Interview Survey from 1998 to 2006 was analyzed. Sample included 625 Chinese, 582 Filipino, 213 Asian Indian, 1124 "other API", and 72207 non-Hispanic white older adults aged 65 and older. Bivariate and multivariate analyses were used to examine the relationship between Asian ethnicities and health status and health service utilization. Results The descriptive statistics show that there are significant differences of sociodemographic characteristics, health status, health insurance, and health service utilization patterns among different groups of Asian older adults. Logistic regression reveals that compared to non-Hispanic whites, other API older adults were more likely to have poor self-reported health; while Chinese, Filipino and other API older adults were less likely to have activity limitations. In terms of health service utilization, all Asian American older adults are less likely to have hospital overnight stays than non-Hispanic whites, and there is no difference of health professional visit among ethnic groups. Age, marital status, education, live arrangement, citizenship and health insurance status are all significant factors related to health status and health service utilization. Implications Understanding of similarity and difference of health needs and health service utilization patterns among different groups can help health professionals provide best services to these populations.

SUCCESSFUL AGING THROUGH THE EYES OF ALASKA NATIVES: THE HEALTH AND WELLBEING OF ALASKA NATIVES IN BRISTOL BAY, AK

J. Lewis, *Psychology, University of Alaska Fairbanks, Fairbanks, Alaska*

There is very little research on Alaska Native elders and how they subjectively define a successful older age. The lack of a minority definition risks portraying them as aging less successful than their non-minority counterparts. This research explores the concept of successful aging from an Alaska Native perspective and what it means to age well in Alaska. The Explanatory Model (EM) was used to gain a sense of the cultural beliefs about aging from Alaska Native elders in Bristol Bay. Research findings indicate that a set of cultural beliefs exist about successful aging, health status is related to successful aging, passing down knowledge is critical to becoming an elder, and aging successfully is based on personal responsibility and cognitions. Most elders stated that reaching a certain age (e.g. 65) does not determine their status as an elder, but rather the wisdom and experiences they gain throughout life.

THE EFFECT OF UNIVERSAL HEALTH INSURANCE ON ETHNIC MORTALITY DIFFERENTIAL AMONG THE ELDERLY IN TAIWAN

H. Tung, *Asia University, Wufeng, Taichung County, Taiwan*

Health disparities research has shifted from documenting disparities to focusing more on identifying the underlying causes of health disparities. It is argued that the access, utilization, and quality of health care might explain why ethnic health disparities persist between older African Americans and whites. Before launching the National Health Insurance (NHI) program in 1995, significant health disparities have been documented across different ethnic groups of elders in Taiwan. After the introduction of NHI, surveys have confirmed that the program has greatly improved the accessibility and utilization of health care services among the newly insured. However, it is not clear if the program has contributed to narrowing the mortality gaps across different ethnic groups of elder. Starting from 1989, a longitudinal survey has followed

a national representative sample of elders through 2006. By linking the survey data to the National Death Index, comparisons on mortality differentials were made for the before and after-NHI periods and across three major ethnic groups of elders. Results showed that, before the NHI, 700 deaths (out of 3817) were recorded and 795 deaths (out of 2380) were recorded for the after-NHI period. During both of the two periods, Mainlander elders were significantly less likely to die, when compared to their Min-nan and Hakka counterparts and these ethnic mortality disparities could be explained away by Mainlanders' higher socio-economic standings. It seems that, for this cohort of elders, a universal health insurance program has played a limited role in narrowing ethnic mortality differentials among the elderly in Taiwan.

ENGLISH LANGUAGE PROFICIENCY AND DEPRESSIVE SYMPTOMS AMONG CHINESE AMERICAN ELDERS IN ARIZONA

S. Kang, S. Moon, R. Basham, *School of Social Work, The University of Texas at Arlington, Arlington, Texas*

Introduction. The effects of English language proficiency and social support on depressive symptoms among 120 Chinese American elders in Arizona were examined using the frameworks of the stress coping theory. Despite the rapid growth in the number of Chinese American residents aged 65 or older in Arizona in the last decade, policy makers and gerontology practitioners have no empirical data on which to design programs aimed at the specific needs of this elderly population. **Methods.** The reliability of Chinese version of GDS with this sample was .81. A snowball sample of 120 Chinese American elders aged 65+ ($M = 75.9$; $SD = 7.2$; 62.5% female) completed one and half hour survey. Due to the lack of ethnic enclave resources, the quality of life experience of Chinese American elders in Arizona- which was calculated by Geriatric Depression Scale (GDS) - might differ from that of their counterparts living in or near ethnic enclaves in major metropolitan areas. **Results.** Contrary to this assumption, the proportion of Chinese elders with depressive symptoms was 15% of the sample which is similar to mainstream American elderly population (The standard cutoff point for depression in the total GDS score is > 11). Based on multiple regression analyses, the models ($R^2 = .478$) indicate that English language proficiency, health, family social network were significant correlates in explaining depression scores. The family responsibility expectation factor and the perception of these family value differences between generations did not make any significant impact on depression levels.

THE DIFFICULTY OF LATER STAGE LIFE OF THE ABORIGINAL OLDER ADULTS IN TAIWAN

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Little research on aging in Taiwan is focused on aboriginal older adults reside in remote or mountain area and whose life style and culture are very different from the majority of Taiwanese. This study explores the difficulty of later stages of life in the community-dwelling older aboriginal people. Data collection includes in-depth interviews and community observation. Participants involved with 12 persons aged over 65, including 8 females and 4 males, from two different tribes of aborigines in Taiwan. There are four themes discovered on the study. First theme is longing for connection. The participants feel very much isolated and lonely because their children are forced to work in the city to earn a living and rarely visit. Second theme is lacking of financial resources. The older adults rely on government small pension to support themselves and health care expenses. They often need to seek for financial assistance from churches and charity organizations. Third theme is accessibility to health care. They face difficulties in transportation due to distance from the health care institutions, excluded from the modern medical technology, and short of money to take care of multiple chronic illnesses. Fourth theme is spiritual distress. Most partici-

pants yearn to chat with their peers, visit other tribes, travel beyond their villages, even find something meaningful activities; however, it seems little chance to fulfill these wishes. The aborigines have the right for life development, it is urgent to meet the need of those marginalized older adults in Taiwan.

AGE DIFFERENTIAL EFFECTS OF ACCULTURATION ON MENTAL HEALTH STATUS AMONG KOREAN AMERICAN MIDDLE-AGED AND OLDER ADULTS

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Acculturation is a crucial variable in mental health research and practice with racial/ethnic minority populations.. Its effect on mental health outcomes, however, may vary by age groups and the different indicators of acculturation. Therefore, the main purpose of this study is to examine the effects of acculturation on psychological distress by age groups among Korean Americans. Data for this study were pooled from the 2005 and 2007 California Health Interview Survey (CHIS) of a statewide representative sample of Korean Americans aged 30 and over. The level of psychological distress was assessed by Kessler K-6 scale. Three age groups were used: 30-49, 50-64, and 65+. Three indicators of acculturation included English language proficiency, the length of stay in U.S., and percent of life in U.S. Gender, education, income, poverty, and disable status were controlled for in the analysis. The ordinary least square regression with Jackknife replicative sampling weights applied. Results showed that the effects of acculturation on psychological distress varied by age groups. English proficiency and the percent of life in U.S. were significantly associated with the psychological distress for 65+ group. The lack of English proficiency appeared to increase the distress ($b = .66$, $p < .01$), while the higher percent of life in U.S. decreased the distress ($b = -.46$, $p < .01$). The length of stay in U.S. was significant only for 30-49 group. Results suggested that psychological distress varies by three different indicators of acculturation among the age groups. The services or interventions should take into consideration the age group and each dimension of acculturation, rather than treating them as homogeneous.

ETHNIC DISPARITIES IN ORAL HEALTH STATUS AND ACCESS TO CARE AMONG OLDER ADULTS IN NYC

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Oral health is essential to older adults' general health and well-being. Poor oral health is associated with pain, loss of teeth, poor nutrition, and chronic diseases such as diabetes. Despite the growing problem, little is known about oral health status and access to dental care among minority populations particularly Asian Americans. The CDC has emphasized the need to test population-based approaches to oral health promotion and disease prevention in the elderly. Senior centers represent a promising setting for these activities. To define the oral health status and access to care among older, lower income, community dwelling adults we conducted a survey of 1,870 randomly selected adults over the age of 60 attending one of a representative sample of 56 senior centers in NYC. Compared with Whites, Hispanics and African Americans, Asian Americans were more likely to report problems with eating or chewing solid foods because of problems with their teeth, to have lost permanent teeth, to report never having seen a dentist, and less likely to report having dental insurance. We will present additional data on the association between oral health status and chronic health conditions, high risk health behaviors, level of education, income and immigration status. The projected aging of the US population heightens the urgency of addressing oral health needs for the elderly yet data on high risk immigrant populations is lacking. This study fills gaps on oral health data among Asian Americans and helps define risks and opportunities for interventions among minority older adults.

ACCULTURATION AND PERCEIVED MENTAL HEALTH NEED AMONG OLDER ASIAN AMERICANS

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Researchers note the crucial role the perception of mental health need plays in help-seeking behavior among the general population. Gerontologists studying Korean American elders have noted the cultural influences on perceived mental health need. To shed light on an understudied topic, this study explored the role that culture and acculturation play in the report of perceived mental health need among older Asian Americans. Data on 979 Chinese, Filipino, and Vietnamese American respondents over the age of 50 were extracted from the 2001 California Health Interview Survey. A logistic regression model was tested to identify the unique influence of culture and acculturation on the report of perceived mental health need. Controlling for other factors, logistic regression analyses revealed the independent effects of age, ethnic background, and nativity on the likelihood of perceiving a mental health need. Asian Americans over 65 were less likely than those between 50-64 to report perceiving a mental health need. In addition, Chinese Americans were less likely than Vietnamese Americans to perceive having a mental health need. The foreign born were less likely than those born in the U.S. The results suggest that culture influences the perception of mental health need among older Asian Americans. A deeper understanding of perceived mental health need will inform the development of interventions to reduce health disparities.

RACIAL AND ETHNIC DIFFERENCE IN HEALTH AND MENTAL TRAJECTORIES OF OLDER PEOPLE

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Objective: Although racial and ethnic disparities in health and mental health outcomes are well documented, very little has been known on how race and ethnicity interact with other variables to affect the trajectories of health and mental health as people age. The objective of this study were to understand the differences in health and mental health trajectories among older people in difference racial and ethnic groups and how these trajectories were shaped by other socioeconomic factors. **Methods:** Data for this study come from 1994 to 2006 longitudinal data from the HRS and AHEAD studies. Outcome variables included whether the respondents were still alive or not, self-reported health, number of ADL and IADL difficulties, and CESD depression level in each survey year. The sample included 21,454 individuals, among them, 77% were non-Hispanic White; 15% were non-Hispanic Africans, and 8% were Hispanics. Random effect model and growth curve model were used for data analyses. **Findings:** there were significant health and mental health disparities across racial and ethnic groups and these disparities persisted as people aged. Members of different racial and ethnic groups and of different age cohorts (AHEAD vs HRS) showed different patterns of health and mental health trajectories as they aged. The health and mental health trajectories across racial and ethnic groups diverged (e.g. stayed alive) or converged (e.g. levels of depression) as people aged, depending on the health measures.

SESSION 600 (PAPER)

RECENT ADVANCEMENTS IN THE BIOLOGY OF AGING

DATE OF ECLOSION AS A DETERMINANT OF LONG LIFE IN THE MEXFLY ANASTREPHA LUDENS: INSIGHTS ACROSS DIET, CALORIC RESTRICTION AND REPRODUCTION

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Diet and reproduction are among the most important modifiable factors which extend life span in various model organisms, but interrelationships between them are not yet clear. We use unique experimental data on daily reproduction and survival of individual fruit flies from eight cohorts eclosed at different dates in 2004 and 2005 who were treated with varying proportions of sugar and yeast and subject to different caloric restrictions (CR). We investigate the relationship between eclosion date and longevity across diet, CR, and reproduction in *A. ludens*. We show that date of eclosion can be associated with uncontrolled external or internal factor(s) which can modulate longevity of males and females independently of diet and reproduction to the extent similar to the effect of diet on longevity. The effect of diet manipulation on longevity is sensitive to date of eclosion with the role of CR in life extension ranging from beneficial to harmful. Interaction of date of eclosion with compositional changes of sugar and yeast but not with CR is responsible for real life extension. In contrast, we show that highly protein-enriched diets reliably maximize reproduction but not life span. Decreased longevity of flies treated with high-protein diets may be associated with harmful consequences of protein ingestion but is unlikely a result of high reproduction rates. Eclosion cohorts that typically have short life spans have the greatest potential to benefit from diet manipulations. Finally, we present evidence for the presence of two frailty-sensitive weakly interacting mechanisms of longevity in female flies.

AGE-RELATED DECLINES IN PARATHYROID HORMONE RECEPTOR EXPRESSION IN MAMMALIAN SKELETAL MUSCLE

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Objective: To determine parathyroid hormone receptor (PTH1R) expression in young and aged rat plantarflexor muscles (medial & lateral gastroneurii, plantaris and soleus). **Background:** Although chronic, sustained elevations of parathyroid hormone (PTH) are known to be catabolic with regard to bone, daily injections of recombinant PTH are used as an anabolic (bone-forming) agent in the treatment of osteoporosis. Anecdotal reports of reduced muscle fatigue and improved physical function with PTH treatment suggest a potential anabolic effect of PTH on skeletal muscle. PTH1R is expressed in cardiac muscle, where PTH has been shown to exert a positive inotropic effect. However, expression of PTH1R in skeletal muscle has only been reported at the transcript level. **Method:** Plantarflexor muscle samples from 7 adult (6-8 months) and 7 aged (24 months) male F344/BN rats were processed for immunoblotting for the PTH1R. Following immunodetection, bands were quantified with laser scanning densitometry. **Results:** A 2-way ANOVA (age X muscle) revealed significant effects of muscle ($P<0.01$), age ($P<0.01$) and an age X muscle interaction ($P=0.04$). All plantarflexor muscles exhibited significant age-related declines in PTH1R (24-33%), except the soleus (2%). Overall PTH1R expression in the soleus was $>20\%$ of that in the other muscles. **CONCLUSION:** These results indicate that PTH1R is expressed in skeletal muscle, and that the greatest

expression occurs in skeletal muscle with faster phenotypic profiles. Accordingly, these results provide an avenue for a direct PTH action on skeletal muscle. Further research is needed to determine the extent of PTH effects in young and old subjects.

MIMETIC ACTIVATION OF ANCIENT STRESS-RESISTANCE PATHWAYS TO INTERVENE IN AGE AND DISEASE

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Objectives: To assess the ability of hibernation mimetics, Deltorphins, to tolerate ischemic stress of hemorrhage. **Background:** Molecular mimics of the environmental cues have emerged as triggers of the protective and rejuvenating molecular pathways from the studies from this laboratory* and from numerous other investigators. **Methods:** Rats were fitted with femoral arterial and venous catheters for measurements of mean arterial pressure (MAP), heart rate (HR), and intravenous (i.v.) injections of isotonic saline, 1 mg/kg Delt-Dvar, or 2 mg/kg Delt-Dvar. During hemorrhaging, 30% (5 mL) of total blood volume was collected from the arterial catheter. **Results:** Saline and 1 mg/kg Delt-Dvar rats treated post hemorrhage had similar MAP and HR after hemorrhage. In contrast, 2 mg/kg Delt-Dvar administered after hemorrhaging led to a faster and more complete recovery of MAP than compared with the other groups. In hemorrhaged rats, the average HR gain (bpm/mmHg) after 2 mg/kg Delt-Dvar treatment was greater and the BP50 (BP at one-half the HR range) was significantly lower than after saline treatment. **Conclusion:** After hemorrhage, 1) stimulation of Delt Dvar opioid receptors leads to improved MAP, and this recovery may involve a change in baroreflex sensitivity. 2) In our other studies, using, DeltE, another peptide, significant extension of survival without fluid resuscitation was found. 3) Since deltorphins preserve function during stress, and strength muscles during hibernation, agonists of the delta opioid receptor may stimulate type 2 muscles in the absence of exercise. *Shawna McBride and Mikal Rutten graduate studies.

EFFECTS OF ACE-INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS ON MITOCHONDRIA-DRIVEN APOPTOSIS IN RAT GASTROCNEMIUS MUSCLE

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Mitochondrial apoptotic signaling is suggested to play a role in age-related muscle loss and functional decline. We have previously shown that treating aged rats with angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) improves physical function. Recently published data indicate that this effect may be mediated by attenuation of age-related loss in mitochondrial number and function. However, no studies have yet investigated the effect of ACEIs or ARBs on the extent of skeletal muscle apoptosis. In the present study, we investigated whether 3-month treatment with ACEI (enalapril, 20 and 40 mg/kg) or ARB, (losartan, 30mg/kg) impacts the extent of apoptosis and mitochondrial apoptotic signaling in gastrocnemius muscle of male Fischer 344xBrown Norway rats (n=10/group). Treatments were started at 24 months and rats were sacrificed at 27 months of age. Rats receiving high-dose enalapril displayed decreased gastrocnemius apoptotic DNA fragmentation compared to placebo. Conversely, no changes in the extent of apoptosis were detected in losartan-treated rats. Bax-to-Bcl2 ratio was decreased in all treatment arms compared to placebo, indicative of a lower apoptotic potential. However, increased content of Bcl-2 and decreased levels of Bax, cytosolic cytochrome c, active caspase-9 and 3 were only detected in the enalapril groups. The magnitude of those changes was greater in the high-dose arm. In contrast, nuclear translocation of endonuclease G and apoptosis inducing factor was not affected by either treatment. Our findings indicate that 3-month enalapril treatment selectively down-regulates, in a dose-dependent fashion, the

mitochondrial caspase-dependent apoptotic pathway in gastrocnemius muscle of old rats.

SESSION 605 (SYMPOSIUM)

THE PATHOBIOLOGY OF DEMENTIAS OF THE ALZHEIMER TYPE: RECENT ADVANCES

Chair: G.M. Martin, *Pathology, University of Washington, Seattle, Washington*

Discussant: S.A. Small, *Columbia University, New York, New York*

“Dementias of the Alzheimer Type” (DAT) is a terminology which reminds us that “Alzheimer’s disease”, while having certain common histopathological and clinical features, may yet prove to reflect several pathogenetic subsets. Scott Small and Karen Duff have recently suggested a “dual pathway” model of causality, whereby the neurotoxic Abeta peptide and abnormal forms of tau can be linked by separate mechanisms driven by a common upstream driver (Neuron 60:534, 2008). Todd Golde will then bring us up-to-date on the genesis of the family of Abeta molecules and current views on which species are the toxic moieties. Synapses seem to be a major target of such toxicity, but some of us may have more to spare than others; John Morris will give us the latest evidence of this “synaptic reserve” hypothesis. Frank La Ferla will conclude by turning to some good news – the possibility of developing a novel therapy based upon modulations of histone deacetylase activities. Remarkably, this story finally provides a bridge to current research on the basic biology of aging.

TARGETING “TOXIC” A β PEPTIDES IN ALZHEIMER’S DISEASE

T.E. Golde, *Mayo Clinic Florida, Jacksonville, Florida*

Amyloid β peptide (A β) accumulation within the brain is a hallmark of Alzheimer’s disease. The accumulation of aggregated A β is thought to initiate a pathological cascade that results in cognitive decline. A β is generated from the amyloid β protein precursor (APP) through sequential proteolysis by the β - and γ -secretases. A 40 amino acid form of Abeta is the major secreted A β species, whereas the minor 42 amino acid form of A β has been implicated as the initiating molecule in the pathogenesis of AD. Though monomeric A β is not toxic, various A β aggregates show “toxic” properties. In this talk I will provide both an overview of the rationale for, and the methods being used to, develop therapies targeting A β , A β aggregates or both. I will also highlight 1) the controversies regarding the composition of the toxic species of A β , and 2) the challenges of developing disease modifying therapies for AD.

STEM CELL THERAPY AND ALZHEIMER’S DISEASE

F.M. LaFerla, *Neurobiology and Behavior, University of California, Irvine, Irvine, California*

Neural stem cell transplantation represents an unexplored approach for treating neurodegenerative disorders associated with cognitive decline. In Alzheimer disease, beta-amyloid plaques and tau-laden neurofibrillary tangles accumulate in several brain regions, leading to synaptic dysfunction and cognitive deficits. Here we show that neural stem cells transplanted into the hippocampus of Alzheimer transgenic mice rescue spatial learning and memory deficits. Remarkably, cognitive function is improved without altering Abeta or tau pathology. Instead, the mechanism underlying the improved cognition involves a robust enhancement of hippocampal synaptic plasticity, mediated by brain-derived neurotrophic factor (BDNF). Gain-of-function studies show that delivery of recombinant BDNF mimics the beneficial effects of NSC transplantation. Furthermore, loss-of-function studies show that depletion of NSC-derived BDNF fails to improve cognition or restore synaptic plasticity. Taken together, our findings demonstrate that neural stem cells can ameliorate complex behavioral deficits associated with widespread Alzheimer disease pathology via BDNF.

LINKING A β AND TAU IN LATE-ONSET ALZHEIMER'S DISEASE

S.A. Small, *Columbia University, New York, New York*

Alzheimer's disease is characterized by abnormal elevation of A β peptide and abnormal hyperphosphorylation of the tau protein. The 'amyloid hypothesis', which is based on molecular defects observed in autosomal-dominant early-onset Alzheimer's disease (EAD), suggests a serial model of causality, whereby elevation of A β drives other disease features including tau hyperphosphorylation. Here, we review recent evidence that suggests that an alternative model might exist in late-onset AD (LOAD), the complex and more common form of the disease. Specifically, based on recent molecular findings it is possible to hypothesize a 'dual pathway' model of causality, whereby A β and tau can be linked by separate mechanisms driven by a common upstream driver. This model may account for the results of recent drug trials and, if confirmed, may guide future drug development.

SESSION 610 (PAPER)

ATTITUDES, HEALTH, AND WELL BEING IN FAMILIES

A STUDY ON THE QUALITY OF RELATIONSHIP BETWEEN PARENTS-IN-LAW AND FOREIGN DAUGHTERS-IN-LAW IN SOUTH KOREA

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The purposes of this study were to explore the quality of relationship between parents-in-law and their foreign daughters-in-law and to examine factors influencing the quality of relationship. For the study, the data were collected from 193 elderly people aged 60 and over who have foreign daughter-in-law in Seoul, Kyunggi-do, and Chonla-do of South Korea. The quality of relationship with foreign daughters-in-law was measured by subjective evaluation about the degree of the family member interaction such as love, care, acceptance, and respect perceived by parents-in-law. Demographic variables of the elderly and foreign daughters-in-law and characteristics of the relationship were included in the analysis. Results showed that the quality of relationship between parents-in-law and foreign daughters-in-law was relatively good, compared to Koran daughters-in-law. Cultural competency, level of education of daughters-in-law, and marital relationship were associated with greater perception of quality of relationship. This study was meaningful because it examined firstly the relationship between parents-in-law and foreign daughters-in-law in Korean society.

THE IMPACT OF CHRONIC ILLNESS WITHIN GRANDFATHER-GRANDCHILD RELATIONSHIPS

A. Taylor², J. Bates¹, *1. Syracuse University, Syracuse, NY, 2. East Carolina University, Greenville, North Carolina*

Little is known specifically about grandfathers and their relationships with their grandchildren, particularly in regard to grandfathers who are experiencing a chronic illness. The findings from this study help fill gaps in our understanding of grandfather-grandchild relationships by testing a conceptual model of grandfather involvement as it relates to chronic illness. The following research questions were asked: (1) Does grandfather involvement (frequency of contact, level of commitment, and performance of role related activities) differ among grandfathers suffering from chronic illnesses when compared to more healthy grandfathers? (2) Do grandfathers with diabetes, heart disease, and/or hypertension differ in their involvement with their grandchildren? Three hundred and forty-three grandfathers completed a questionnaire assessing perceptions of involvement with a target grandchild (2 months-27 years old). Of the 343 participants with complete data, 175 had at least one chronic illness (i.e., diabetes, heart disease, and/or hypertension). Analysis of variance was used to examine differences among healthy and chronically ill grandfathers. Findings indicate that grandfathers with

a chronic illness were not significantly different from grandfathers without a chronic illness in regards to their contact, commitment and types of role activities. Sixty-one grandfathers reported having diabetes, and fifty-two reported having heart disease, while one hundred and thirty reported having hypertension. ANOVA results indicate that there were no significant differences among grandfathers having these distinct chronic illnesses. These results were somewhat surprising, as they indicate that grandparents with the above mentioned chronic illnesses are equally involved with their grandchildren when compared to their non-chronically ill grandfather counterparts.

FATHER'S TRADITIONAL ATTITUDES: THEIR ROLE IN THE FLOW OF SUPPORT FROM ADULT CHILDREN

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The study of exchanges between parents and adult child has been a major focus of research on intergenerational relations across the past half century. Studies that have included both mothers and fathers have found substantial gender differences between the flow of support from children to parents, but few differences in the predictors of support to mothers and fathers. We contend that there is one important predictor of support from children to fathers that has received no attention in the literature: fathers' traditionalism. In this paper, we explore the role fathers' traditionalism plays in their receipt of advice, expressive and instrumental support from their adult children, using quantitative and qualitative data from 130 older fathers collected as part of the Within-Family Differences Study. Specifically, we test the hypothesis that fathers who hold more traditional values are less likely to receive all three types of support from their adult children. Preliminary analysis suggests that the more traditional values fathers' hold, particularly regarding gender, the less likely they are to receive support from their adult children. Further, more traditional fathers are less likely to solicit, as well as actually receive, support from their children.

SKIPPED-GENERATION HOUSEHOLDS IN RURAL CHINA: INFLUENCES ON THE WELL-BEING OF OLDER ADULTS

L. Baker, M. Guo, M. Silverstein, *Andrus Gerontology Center, University of Southern California, Los Angeles, California*

The past few decades have seen a large increase in multigenerational coresidence in the United States, particularly of the number of children living with grandparents in the absence of both parents. Raising a grandchild in a skipped-generation household is often associated with high levels of burden, depression, and poor health outcomes among older adults. These households are also on the rise in rural China, primarily due to work-related migration among the working age population. However, given the strong norms of filial piety among older adults in China, combined with the more reciprocal nature of support within these families (given high levels of financial support provided by migrant children), it is unclear what effect these skipped-generation households have on the health and well-being of older Chinese adults. This research examines the influence of transitions into the caregiving role on the well-being of older adults in rural Anhui Province. A series of pooled multivariate regression models (N=1956) suggest that living in a skipped generation household in China is associated with enhanced well-being among grandparents. This is explained in part by an initial selection of healthy grandparents with more resources into the caregiver role. However, the well-being of these grandparent caregivers is also enhanced by an increase in financial support from migrant children upon the assumption of care. These results suggest that this household structure may in fact be beneficial for many older adults in China.

PREDICTORS OF GENERATIVE GRANDFATHERING

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Over the past 40 years, scholars who study grandparents have amassed an impressive body of information about grandparental roles, grandparenting styles, and possible relationship outcomes. Nevertheless, two major criticisms of the literature remain; the lack of theory development regarding grandparenting and the absence of any systematic investigation of grandfathers. Recent theorizing about grandfathering has attempted to address these criticisms. Author (2009) suggests that grandfathering is generative work where grandfathers are involved in caring for and nurturing offspring (Erikson, 1982) based on the developmental and contextual needs of grandchildren. Thus, in generative grandfathering, grandfathers perform lineage work, mentoring work, spiritual work, recreation work, family identity work, and investment work. Previous research suggests that participation in generative grandfathering activities with grandchildren has a positive and statistically significant effect on grandchild-grandfather relationship quality and satisfaction (Authors, 2008). However, the purpose of this paper was to explore factors that predict participation in generative grandfathering. Data were collected from 349 grandfathers regarding a particular grandfather-grandchild relationship. The results of six hierarchical multiple regressions, where various background, family, and demographic characteristics were regressed onto each of the generative work ethics (DVs) mentioned above, indicate that each regression model was statistically significant (Adj. R-square = .21 to .41, $p < .0001$). Factors such as grandchild age, grandfather age, grandfather subjective physical health, grandfather personality, support from spouse, support from grandchild's father and mother, as well as the frequency of contact, and level of commitment were all significant contributors (IVs) to participation in generative grandfathering activities.

SESSION 615 (SYMPOSIUM)

CHANGE AND DIVERSITY IN NEIGHBOURHOOD EFFECTS ON HEALTH AND WELLBEING

Chair: F. Thomese, *Sociology, VU University, Amsterdam, Netherlands*

Discussant: K. Cagney, *University of Chicago, Chicago, Illinois*

The neighborhood is considered an important social environment in later life. Various neighbourhood characteristics may stimulate or inhibit social participation and health behaviours. This symposium looks at people and their local environments in a dynamic way, by taking into account the personal and wider historical context of the mechanisms under consideration. In the local living environment personal history meets society, and both are in constant change. Such changes challenge our understanding of neighborhood effects on health and wellbeing, which is mainly based on more static approaches of neighbourhoods and people. A conceptual elaboration by Prof. dr. Chris Phillipson from Keele (UK) first focuses on globalization, and neighborhood inequalities. Three empirical papers subsequently deal with consequences of neighbourhood and personal change in Germany around the turn of the century (Tesch-Roemer at al.); absolute and relative inequalities among White and Black Americans (Dr. Jessica Kelley-Moore from CASE); and the interactions between neighbourhood characteristics and internet use (Dr. Fleur Thomese from VU University (NL)).

CHANGING LIVES IN CHANGING NEIGHBOURHOODS: RESULTS FROM THE GERMAN AGEING SURVEY (DEAS)

C. Tesch-Roemer, A. Motel-Klingebiel, O. Huxhold, *German Centre of Gerontology, Berlin, Germany*

Quality of life in the second half of life is influenced by contexts on different societal levels. Districts and neighborhoods have a substantial, but often neglected contextual impact on quality of life in old age. Cross-sectional and longitudinal analyses of data from two waves (1996, 2002) of the German Aging Survey (DEAS) showed a threefold impact

of a district's prosperity on the individual's perception of living standard: Direct effects on resources, direct effects on evaluations and a moderating effect on their interaction. We will extend our analyses to a variety of contextual factors and other dimensions of quality of life. Multilevel analyses, which will include new longitudinal data of the DEAS from 2008, explore to what extent individual changes in quality of life interact with social contexts. They also show the impact of policy interventions on the community level on quality of life in the second half of life.

INEQUALITIES IN INTERNET USE, NEIGHBOURHOOD INTEGRATION, AND LONELINESS: FINDINGS FROM THE LONGITUDINAL AGING STUDY AMSTERDAM (LASA)

F. Thomese, *Sociology, VU University, Amsterdam, Netherlands*

The past decade has witnessed increasing use of the Internet for maintaining personal relationships among older adults. Especially the higher educated men have become familiar with their computers as a means of communication. It is unclear how this change affects the integration in the neighbourhood and its effect on loneliness. In other age groups both a deepening, and a loss of personal relationships and wellbeing has been demonstrated. Data from 999 LASA respondents collected in 2005-2006 show that internet users and non-users have the same neighbor network size. Only among the non-users do these networks alleviate loneliness, controlling for sex, age, sex and neighbourhood indicators. Men and those with a partner have benefits of both internet use and neighbor network size for loneliness reduction. Only the vulnerability of men to loneliness seems to decrease, whereas other inequalities remain the same or are deepened.

URBANIZATION AND AGING: SOCIAL DIVISIONS AND NEIGHBOURHOOD CHANGE

C. Phillipson, *Centre for Social Gerontology, Keele University, Newcastle-under-Lyme, United Kingdom*

The 21st century has been defined as the 'urban age', with the spread of urbanization illustrated by the rise of global cities. The scale of urbanization raises significant challenges for improving the quality of life of older people. Aging on the one side, and urbanization on the other, are key drivers influencing public policy. Focusing on research from the United Kingdom, this paper reviews findings about the impact of urbanization on older people, with particular reference to neighbourhood and community change. The main issues examined in the paper will be: first, the relationship between urbanization and new forms of inequality operating within communities; second, the impact of urban change on the networks of older people; third, the relationship between urban change and community cohesion. The paper will conclude with a research agenda linking theories and empirical findings from work in urban sociology with that in gerontology.

SOCIAL HIERARCHY AND MENTAL HEALTH AMONG OLDER ADULTS: DOES RELATIVE SOCIAL POSITION IN THE NEIGHBORHOOD MATTER?

J. Kelley-Moore¹, K. Cagney², K.A. Skarupski³, S.A. Everson-Rose³, C.F. Mendes de Leon³, 1. *Sociology, Case Western Reserve University, Cleveland, Ohio*, 2. *University of Chicago, Chicago, Illinois*, 3. *Rush University Medical Center, Chicago, Illinois*

There is a well-established association between relative social position and health. Although previous work has focused primarily on social hierarchies in population contexts, stratification occurs at different levels of social organization with potentially varying consequences for health. Using data from the Chicago Health and Aging Project, we examine the relationship between relative social position in the neighborhood and mental health, marked by depressive symptoms. Neighborhood relative social position was ascertained for two social domains: income and social reputation, indexed by the number of neighbors visiting in one's home. After adjustment for absolute levels on each social domain,

higher neighborhood relative rankings on income and neighbors visiting were significantly associated (p 's < .05) with fewer depressive symptoms. However, the magnitude of these associations varied by absolute levels on each social domain. Neighborhood-level social processes may generate micro-level social hierarchies that are associated with distinguishable psychosocial benefits for those higher in the social hierarchy.

SESSION 620 (SYMPOSIUM)

CREATIVE APPROACHES TO HEALTHY AGING: USING THE ARTS TO HELP PERSONS LIVE WITH DEMENTIA

Chair: R. Roush, *Baylor College of Medicine, Houston, Texas*

Discussant: J. Winakur, *University of Texas - HSC, San Antonio, Texas*

In *The Republic*, Socrates tells Plato's brother, Glaucon, "musical training is a more potent instrument than any other because rhythm and harmony find their way into the inward places of the soul on which they mightily fasten, imparting grace, and making the soul of him who is rightly educated graceful." Over time, the creative arts' role in healing our minds and bodies has become increasingly viewed by health professionals as being important. This symposium explores how using various art forms help persons with dementia and their caregivers cope with that circumstance. Jerry Winakur, MD, will present "My Father, My Patients, Myself: Writing My Medical Life." Based on his book, *Memory Lessons: A Doctor's Story*, geriatrician Winakur will describe how the literary device of composing and using narrative medicine helps him and his patients on the "stage of life." Neuropsychologist Michelle Braun, PhD, will follow with an explication of how the plasticity of the brain and the arts complement neurobiology, allowing persons with dementia to have a better quality of life. Anne Basting, PhD, will present "Exploring the Cultural 'Cure' for Memory Loss." Based on her book, *Forget Memory: Creating Better Lives for People with Dementia*, she will talk about using the frame of cultural studies to examine the relationship between our fears of memory loss and our expectations and understandings of how memory works. Francesca Rosenberg will present how the "Meet Me at MoMA" program uses great works of art to evoke emotional memory among persons with Alzheimer's disease.

THE MOMA ALZHEIMER'S PROJECT: MAKING ART ACCESSIBLE TO PEOPLE WITH DEMENTIA

F. Rosenberg, *The Museum of Modern Art, New York, New York*

The Museum of Modern Art in New York is widely known as the home to one of the most renowned collections of modern art in the world. Lesser known is the fact that MoMA is also a haven to thousands of people with dementia along with their caregivers. MoMA is one of the first museums in the country to offer programs designed to make its collection and special exhibitions accessible to this important audience. Art programs can provide an expressive outlet and opportunities for creative engagement for people with Alzheimer's disease and their caregivers. The act of looking at art within museum settings can provide impetus for meaningful and transformative experiences. Francesca Rosenberg will share findings from an evidence-based research study and discuss why visual art is the perfect tool for engagement and how museums can play a role in enhancing the lives of this vital part of American society.

ARTISTIC ENGAGEMENT IN DEMENTIA THROUGH THE LENS OF NEUROSCIENCE

M. Braun, 1. *Boston VA Healthcare System, Brockton, Massachusetts*, 2. *Psychiatry, Harvard Medical School, Brockton, Massachusetts*

Research abounds about the relationship between various art forms – dance, music, visual arts, activity reminiscence therapy, and theater – and improved quality of life in all stages of dementia. Involvement in art is not only important for improving quality of life and alleviating apathy for individuals with dementia, but it has also shown clinical benefit in the management of troubling symptoms that are difficult to address

with conventional treatments. Art in dementia will be explored from a neuroscientific perspective, with a discussion of the brain mechanisms involved in producing and experiencing various forms of art, as well as those that may be activated when individuals report feeling soothed or positively stimulated by art. Theories about how the neurobiological changes in dementia patients may make them particularly responsive to art will also be discussed.

EXPLORING THE CULTURAL 'CURE' FOR MEMORY LOSS

A. Basting, *University of Wisconsin Milwaukee, Milwaukee, Wisconsin*

Based on research for her book, *Forget Memory: Creating Better Lives for People With Dementia*, Basting uses the frame of cultural studies to examine the relationship between our fears of memory loss, our expectations and understandings of how memory works, and the lived experience of memory loss. As we wait for the pill/s to cure Alzheimer's disease, might there be a parallel cultural "cure" that could ease the pain of stigma, social isolation, and the generally poor quality of care people with dementia experience within our grasp today? Basting suggests that asserting the value of communal memory, and shifting away from the sense that memory is strictly individual property, can help ease the fear and stigma of memory loss that creates so much unnecessary pain in the lives of people experiencing it.

RELIGIOUS INVOLVEMENT AND SELF-RATED HEALTH STATUS: FINDINGS AMONG CHINESE RURAL ELDERLY

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Previous studies have shown that religion plays a beneficial role in individuals' health. However, little has been done in rural China. The purpose of this study was to examine the relationship between religious involvement and self-rated health among Chinese rural elders. This study used the data from a randomly selected sample of 663 elders aged 60 and above in rural Shanghai, China in 2004. The study found that a small percentage of rural elders (15%) reported having religiously affiliation. The ordinal logistic regression results showed that religious affiliation did not influence the self-reported health condition, however, religious practice such as praying, had a negative association. In addition, younger respondents who had higher income and practiced Tai Chi reported better health status, while having chronic conditions were negatively related. Our findings suggest that the association between religion and health needs to be interpreted within a particular social and historical context.

PRECLINICAL ALZHEIMER'S DISEASE: RELATIONSHIP WITH BRAIN/COGNITIVE RESERVE

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The cognitive reserve hypothesis holds that persons with greater reserve tolerate the burden of the neuropathologic lesions of Alzheimer's disease (AD) without becoming demented. Educational attainment serves as a surrogate for reserve. Positron emission tomography with the Pittsburgh Compound-B (PIB) radiotracer for fibrillar amyloid-beta (A β) allows in vivo imaging of cerebral A β deposits, one of the hallmark lesions of AD. In 161 cognitively normal older adults and 37 AD individuals imaged with PIB, we determined whether PIB uptake interacted with level of education to predict cognitive function. As measured by the Clinical Dementia Rating-Sum Boxes, Short Blessed Test, and Mini Mental State Examination, better cognitive performance interacted with increased education in individuals with elevated PIB uptake. Conclusions: Cognitive reserve influences the association between AD pathology and cognitive dysfunction. Education did not influence cognitive performance in PIB-negative individuals, suggesting that education effects on test performance may be mediated by preclinical AD.

DECISION MAKING AND COGNITION

MEDICARE PART D: CHOICE SIZE AND DECISION-MAKING

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Medicare part D has received mixed reviews in terms of its overall design and ease of use. Statistics indicate that the average older adult faces over 50 plans to choose from and is unlikely to choose the best plan based on apparent cost (Gruber, 2007). The current project examines the impact that choice set size has on decision-making for Medicare part D material. Two hundred and twenty-three individuals participated in the study that included measures of numeracy, processing speed, and a simulated Medicare worksheet designed from the Medicare web site. Participants were randomly assigned to either a 3, 10, or 20 plan condition and asked to choose the best plan. Results indicated that participants in the 20 plan condition performed significantly worse than the 3 plan condition ($p < .01$). Older adults as a group performed worse across conditions ($p < .01$). Numeracy was a significant covariate, and when added to the model, eliminated the effect of age. In summary, our results indicated that increasing number of choices impaired the decision-making of our sample, and that older adults were especially impacted by the effect.

INFLUENCE OF LOCUS OF CONTROL, GENDER, AND DECISION DOMAIN ON OLDER ADULTS' PREFERENCES FOR COLLABORATIVE DECISION MAKING

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Previous research has demonstrated that older adults can benefit from collaborating with others when making decisions. The present study examined the effects of locus of control (LOC), gender, and decision domain on older adults' preferences for collaborative decision making. Participants (aged 55-90 years; $n=75$ men, $n=99$ women) completed a questionnaire containing three measures of LOC (internal, chance, powerful others), as well as preferences for involving others when seeking information needed to make a decision (information seeking) and actually making a decision (behavioral involvement) in three domains (financial, medical, and product purchasing). Analyses consisted of a series of 2 (LOC) \times 2 (sex) \times 3 (decision domain) mixed ANOVA's with repeated measures on the latter. Separate ANOVA's were conducted for each LOC measure. The dependent variables were preferences for information seeking and behavioral involvement. Analyses revealed that gender interacted with preferences for information seeking and behavioral involvement. For information seeking, gender differences emerged only for medical decisions. For behavioral involvement, men and women differed in terms of preferences for collaboration with others on medical and purchasing decisions, but not financial decisions. Powerful others and chance LOC interacted with information seeking such that both affected preferences for seeking information about purchasing a product. The study also revealed that spouses and children were participants' most preferred collaborators. This, along with the aforementioned findings has important implications for how older adults make medical and purchasing decisions, and on the extent to which individuals may benefit from collaborative efforts in each of these domains.

THE BENEFITS OF CONSCIOUS VERSUS UNCONSCIOUS THOUGHT ON EFFECTIVE DECISION MAKING IN ADULTHOOD

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Some surprising research on decision-making has suggested that performance may be optimized if individuals are prevented from engaging

in active deliberation (e.g., Dijksterhuis, 2004). This enhancement through unconscious processing has interesting implications for decision-making in later life, where deliberation may suffer through inefficient or declining cognitive resources. The present study examined the relative benefits of active deliberation versus passive processing in facilitating performance as a general test of the model, while also testing the hypothesis that unconscious processing would disproportionately benefit decision-making in old age. Different-aged adults (20–85 years of age) were presented with two consumer decision-making tasks involving grocery stores and apartments under conditions in which they were instructed to engage in active deliberation or were prevented from thinking about the decision. Preliminary analyses on the data from 106 (of 168) participants provide little evidence for the benefits of unconscious thought over more active deliberation. Participants of all ages selected the optimal alternative at above-chance levels, and the probability of doing so was actually higher following active deliberation. Performance was also better in task conditions requiring active deliberation for successful performance (e.g., participants had to distinguish between attributes that were relevant and irrelevant to the decision at hand). Although not great, some age differences were evident in the impact of decision context (conscious vs. unconscious thought) and the degree to which task materials required active deliberation. These effects may be tied to age differences in cognitive resources. Implications for effective decision-making in later life will be discussed.

JUSTIFYING DECISIONS ABOUT SUNK COSTS: DO OLDER AND YOUNGER ADULTS REPORT DIFFERENT GOALS?

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Compared to younger adults, older adults' decisions about future investments are less influenced by prior investments that are "sunk" and can not be recovered—older adults are less likely to commit the sunk-cost fallacy (Strough, Mehta, McFall, & Schuller, 2008). We investigated whether older and younger adults' justifications for decisions about sunk costs reflected different decision-making goals. Drawing from prior research, we predicted younger adults' negativity bias and loss aversion would be associated with concerns about the amount of prior investment. We predicted older adults' positivity bias would be associated with considering affectively rewarding alternatives. Twenty-one community-dwelling older adults (16 women, M age = 75.43 yrs) and 20 younger adult college students (12 women, M age = 23.30 yrs) participated. Participants made decisions about hypothetical activities that had become boring and were asked what their goal would be if the hypothetical situation happened to them. Goals were reliably coded into 1 of 10 categories ($\kappa = .58 - .71$). In accord with predictions, younger adults were more likely to focus on the amount of prior investment ($p < .05$, $\eta^2 = .16, .33$). Younger adults also were more likely to mention social conventions ($p < .05$, $\eta^2 = .14$). In contrast to predictions, older adults were not more likely to consider positive alternatives to the boring activity, but were somewhat more likely to mention personal characteristics as a justification ($p = .07$, $\eta^2 = .08$). Implications of the findings for understanding mechanisms underlying age differences in decisions about sunk costs are discussed.

NONFLUENT APHASIA: THE RELATIONSHIP BETWEEN DEGREE OF LEFT- HEMISPHERE LESION, HOMOLOGOUS BRAIN ACTIVITY, AND PERFORMANCE

Z.Z. Zlatar, I.F. Levy, M. Benjamin, K. McGregor, M. Cohen, J. Trinastic, B. Crosson, Clinical & Health Psychology, University of Florida, Gainesville, Florida

Little is known about the predictive value of degree of lesion on the reorganization of language function and recovery in aphasia. This study investigated whether degree of lesion in left-perisylvian regions of interest (ROIs) was associated with the amount of right-hemisphere homologous functional activity during word generation, and performance on

the Boston Naming Test (BNT) and Western Aphasia Battery-Aphasia Quotient measures (WAB-AQ). Nineteen chronic, nonfluent aphasia patients (Mean age=67, SD=12) received structural and functional MRI prior to an intention-based language treatment aiming to re-lateralize language functions to the right hemisphere. During imaging, patients performed an event-related category member generation task. Two independent raters scored the degree of lesion in the left hemisphere on a scale of 0 to 5 and correlated the ratings with the volume of functional activity in the right-hemisphere homologues and the BNT and WAB scores prior to treatment. There was no relationship between degree of lesion in the left hemisphere and the amount of functional activity in the right-hemisphere homologous structures. However, patients with a higher degree of lesion showed poorer performance on measures of fluency and repetition. The authors concluded that reorganization of language functions to the right-hemisphere homologous structures shown in the literature may not be a universally applicable concept and that degree of lesion is marginally related to spontaneous speech and repetition abilities in this sample.

HOW BRAIN FITNESS TRAINING ENHANCES OLDER ADULTS' PSYCHO-SOCIAL WELL-BEING: A CONTROLLED COMPARISON

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This study examined two goals: 1) identify differences in cognitive improvement among healthy older adults using the brain fitness program (BFP) compared to those using crossword puzzles and 2) differences between these groups' improvement in psycho-social functioning. Understanding brain plasticity has led to numerous computer software, video games, and other challenges to keep older adults' brains active. Research has found the BFP (Mahncke et al., 2006) to lead to significant improvement in cognition. Anecdotal stories have indicated that this cognitive improvement has also improved older adults' psycho-social dimensions. Little research has empirically examined these claims. This quasi-experimental design study involved older adults residing in a retirement community comparing the cognitive and psycho-social improvements among two groups. The experimental group (N=12) completed 40 hours in eight weeks with the BFP; the control group (N=10) used crossword puzzles for 40 hours in eight weeks. The researcher's interaction was identical in both groups. Paired t-tests indicated significant improvement in cognitive functioning and the psycho-social dimensions between T1 and T2 for the experimental group while no significant differences were found for the control group. Independent t-tests compared the mean difference scores between T1 and T2 for both groups on depressive symptoms, social interaction, and work and emotional productivity. The BFP group showed significantly more improvement in depression ($t=3.30$, $df=20$, $p=.002$) and work productivity ($t=1.74$, $df=20$, $p=.049$) than the control group. The study confirms that the choice of cognitive enhancement programs makes a difference and that cognitive improvement is related to psychosocial improvement.

TRAINING FOR TRANSFER: A META-ANALYSIS OF COGNITIVE AND PHYSICAL FITNESS TRAINING IN OLDER ADULTS

S. Hindin, E. Zelinski, *University of Southern California, Los Angeles, California*

Recent literature has questioned the possibility of transfer of skills trained to other cognitive abilities among older adults and whether cognitive or physical exercise is better. A quantitative meta-analysis was conducted to determine which training, constructs, outcomes, and transfer combinations have shown the largest transfer effect sizes. We hypothesized that effect sizes would vary based on the training, test, and transfer type. Studies that attempted to improve cognitive abilities with aerobic exercise, strategic training, or extended practice were selected if they tested the transfer of untrained abilities and had a no-contact compar-

son group. Only tests that could show transfer were included from the 31 studies in the analysis. From these, 319 effect sizes (Cohen's d) for between group differences were computed and coded several ways including transfer of sensory modality, application of skills to new activities, or over time i.e. e. if training effect was maintained for at least 2 months. The overall effect size was small and heterogeneous across studies (Mean=.05, $Q=217$). Aerobic training and extended practice were homogenous ($N=153$, $Q=63$ and $N=109$, $Q=49$), while strategy training was heterogeneous ($N=63$, $Q=103$). Expected variation was not found; all effect sizes were not far from zero. Past studies, no matter which type of training, do not show transfer for older adults. Exceptions include extended practice for reaction time trials $d=.17$ and maintenance over time $d=.1$ and strategy training of applied skills to new activities $d=.23$, all of which are for cognitive, not physical fitness training studies.

COGNITIVE REHABILITATION ADDRESSING WORKING MEMORY IN OLDER ADULTS

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Objective: Deficits in working memory are associated with age-related declines. Many studies have utilized a cognitive rehabilitation program to enhance working memory performance in elderly populations. Previous researchers have examined a computer-based program, known as Cogmed, which consists of training sessions that successively increase in difficulty. Cogmed training also mandates the integration of caregivers into the cognitive rehabilitation program so as to increase its effectiveness. The present study utilized this program with older adults at a continuing care retirement community (CCRC). **Method:** Participants underwent a screening process to determine the degree of memory impairment. Qualified participants were then randomly assigned to one of two conditions. The experimental condition used the Cogmed software, and the control condition used a sham Cognitive Program. Both programs required an 80% completion of the required 25 sessions, which were distributed over a 5 week period. Each participant (currently 10/group) completed a neuropsychological test battery before and after the intervention and at a 20-week follow-up. Outcomes included cognitive, affective, functional and caregiver markers. **Results:** Groups differed pre-test to post-test in favor of the Cogmed group on several affective/functional/caregiver measures. Cogmed then enhanced working memory in older adults with mild memory impairment, as well as functioning. **Conclusion:** Cogmed appears to enhance working memory in older adults with mild memory impairment. We hope to validate this study with an extended double blind clinical trial on participant-caregiver dyads in a CCRC. We hypothesize that these results will show that Cogmed applied at later life can generalize beyond working memory.

SESSION 630 (POSTER)

EDUCATION & EMPLOYMENT

AN INVESTIGATION OF BEHAVIORAL AND SOCIAL GERONTOLOGY RESEARCH PROGRAMS

P.A. Lichtenberg, *Wayne State University, Detroit, Michigan*

Over a decade has passed since Achenbaum's Crossing Frontiers: Gerontology Emerges as a Science (Achenbaum, 1995) explored how gerontology programs were created and functioned. In order to gain insight into current structural aspects of social and behavioral gerontology programs leaders from 20 programs were interviewed by phone. The interview attempted to garner information from each program across a variety of topics including: research themes and funding priorities, educational and research training programs, interactions with other investigators and other programs on campus; issues regarding budget and work space; fund raising activities, and recommendations for anyone considering developing a new program in gerontology. programs were classified as either Centralized or a Network. A centralized program

was defined as having either faculty lines assigned to the unit or as having an annual budget provided by the University of at least \$250,000 per year. Centralized units were more likely to be identified as an autonomous program and to have fiscal control. The Network programs typically relied on drawing personnel, especially faculty, from across the entire campus and had considerable flexibility in how to carry out their mission. Many of the programs exist because an individual at the university, a foundation, or a state government had a deep personal commitment to older adults and the field of aging. These individuals helped to shape not only the structure of the programs but their overall mission. Four main tensions in the field were identified; gerontology and Ph.D. program structure, community engagement, and involvement in fund raising.

ONLINE GERONTOLOGY EDUCATION EXPERIENCE: FROM ENROLLMENT TO GRADUATION AND EMPLOYMENT

M. Corrigan, *School of Community Affairs, Wichita State University, Wichita, Kansas*

The 1990 Student Right to Know Act requires institutions of higher education to monitor and report graduation rates (student retention). To do this involves tracking student recruitment (both application and enrollment). Data from the National Center for Education Statistics indicates that for Title IV institutions, 4-year graduation rates were 56% in 2005. Other literature finds 70% to 76% 6-year graduation rates. No published studies have specifically examined gerontology program recruitment and retention, nor have published studies examined online education programs as a whole. This session will examine the 6-year recruitment, retention and employment rates for an online masters program in gerontology. The 6-year recruitment rates are important because students taking longer than this time to complete their degree need to repeat or certify prior course work. In the 6 years prior to the conversion to online classes, there were 28 applicants to the program, and 25 (89.2%) enrolled in the program. In the 6 years after the conversion, there were 72 applicants to the program, and 51 (70.8%) enrolled in the program. Prior to the conversion, 19 of the 25 students completed the program (76.0%). After the conversion (to date; not all have reached the 6-year limit), 25 of the 51 students have completed the program (49.0%). Both pre and post conversion to online education, over 85% of graduates found employment in the aging network. Implications of the data for online program student recruitment and retention will be presented at the session.

SERVICE-LEARNING AS A CREATIVE TEACHING METHOD FOR GERIATRIC EDUCATION AND THE VALUE OF INTERPROFESSIONAL EDUCATION

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Background: Interprofessional geriatric education for allied health professionals is a best practice for facilitating collaboration. An interdisciplinary team comprised of several community partners including nursing and social work faculty, a board certified chaplain and health promotion nurses worked in partnership to develop research/educational projects for allied health students that promote healthy aging. Method: Using service-learning as a method for interprofessional education, undergraduate nursing and social work students studying geriatrics designed and implemented four health fairs in local counties. The health fairs featured booths that addressed issues regarding physical, mental, emotional, and spiritual health. Students facilitated each booth in teams of two, a nursing and social work student at each. Results: Following the conclusion of the health fairs students completed a two-page evaluation of their interdisciplinary geriatric learning. Using a mixed method design, 87 students reported a high willingness to share and learn skills of other disciplines and expressed strong professional identities. There

was a statistically significant difference in mean teamwork scores ($p > .01$) of the nursing (mean=39.48, s.d. 5.4) and social work (42.18, s.d. 3.9) students. Students also reported learning the value of interdisciplinary communication and of the necessity of flexibility when working with other professionals. Discussion: Interprofessional practice is essential, as it is a holistic approach to aging clients' physical, mental, emotional, and spiritual needs. Utilizing service-learning as a method for interprofessional geriatric education among allied health students will have a lasting impact on reciprocal learning and best practices for facilitating collaboration among disciplines.

IMPLEMENTING A NEW PARADIGM IN INTRODUCTORY GERONTOLOGY TEXTBOOKS

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Recruiting students into the field of gerontology could not be more important than it is today. Our introductory courses are one of our most valuable tools in achieving that goal. Thus, textbooks for these courses play a critical role. We are entering a time that requires a new paradigm for aging. The roles of older people, including the near old (Baby Boomers), the young old, the middle old, and the oldest old, in the family, in the workplace, and in the broader society continue to evolve. The population of older people is becoming more capable, more numerous, more diverse, and hopefully more integrated into society. The primary purpose of introductory classes should be to capture students' interest in gerontology. Interested students will want to learn more. If students take a boring introductory class, with a dry textbook of encyclopedic knowledge of aging, then we will lose those students to competing fields. Key components of a good textbook, then, include: (a) a framework based on the new paradigm, instead of the demographic imperative, which is not a compelling argument for most of our students; (b) a focus on positive aspects of aging (e.g., capabilities, evolving roles), so that our dialogue is not dominated by disease and decline; (c) provision of good information without overwhelming amounts of detail; and (d) a text that is interesting, especially for the majority of our students who are not already captivated by gerontology. Success in recruiting more students into gerontology depends on implementing the new paradigm.

COMMUNITY-BASED SERVICE-LEARNING FOR HEALTH PROFESSION STUDENTS – DO WE MAKE THE MOST OF IT?

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Most care for older adults takes place outside of institutions but health profession student training occurs predominately in hospitals (IOM, 2007). Community-Based Service-Learning (CBSL) and clinical experiences designed to apply theory into practice while engaging in civic activities should become an increasingly important training component in the education of the future geriatrics/gerontology workforce (Karasić, 2007; Scharlach, 2005). However, little is known about which components of CBSL best stimulate and maintain students' interest in geriatrics/gerontology and which infrastructure best enables Community-Based Organizations (CBOs) to deliver CBSL opportunities of excellence. An interdisciplinary community-academic 20-member Task Force organized by the Institute on Aging, San Francisco, to plan community-based education in geriatrics/gerontology identified six goals for improved CBSL including: 1) Implement and test community-academic interdisciplinary education partnership models analogous to those in successful community-academic translational research partnerships - utilizing instructions in CBO settings to stimulate effective knowledge transfer; 2) Establish specific CBSL learning objectives; 3) Establish standards for CBO preceptors' geriatrics/gerontological core teaching

competencies and preceptorship skills; 4) Provide resources to pay for protected student-preceptor interaction time; 5) Facilitate student contacts with healthy older adults as well as those with illness for instruction in preventive health and to dispel myth about aging; 6) Build the infrastructure for systematic CBSL research. After attending this presentation, participants will be able to discuss the potential of developing community-academic education partnerships to stimulate and maintain students' interest in working with older adults by effective use of CBSL experiences.

WHY LEARN IN OLD AGE? AN OVERVIEW OF THEORY AND RESEARCH ON OLDER LEARNERS

M. Wolf, *Gerontology, Saint Joseph College, West Hartford, Connecticut*

Any discussion of theory and research on older adult learners begins with an understanding of the role of education and construct of learning. For many older persons—whether it be for meaning-making, vocation, literacy, socialization or personal development—learning is a voluntary, often need-driven activity. For many, this is both a process of understanding and influencing the world and an important life course goal, a way of living in community and understanding the contradictions of a life time of experience. This presentation explores the theories and practices currently informing the development of programs and learning experiences for older persons. Included in the underpinnings of study are the theories of Paulo Freire who described the process of praxis as the naming, reflecting, acting and reevaluating on 'e world. Other related theorists cited are Cohen, Sadler and Krett, Erikson, Fisher, Kivnick, and McClusky. Currently, the practice of adult education for an aging society is directed by civic, academic, church-related and entrepreneurial enterprises. This presentation presents several successful models and explores the nature of changing needs in this fast-growing segment of gerontology. Issues of dissent and need-based learning in the field as well as cohort and work-related experiences of older adults are also addressed.

INTERDISCIPLINARY SENIOR MENTORS PROGRAM: LESSONS LEARNED FROM A PILOT PROJECT

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Optimal patient care depends on both physicians and other health care professionals. Because of the focus on collaboration among health care professionals, health systems are encouraging providers to participate in interdisciplinary team meetings. The focus of the meetings is to create individualized, comprehensive and collaborative plan for patient care integrating interdisciplinary perspectives. The UAB Geriatric Education Center offered an opportunity for students from dentistry, medicine, nursing, and social work to participate in an interdisciplinary team training pilot program during the 2009 Spring Semester. 23 students formed 7 groups and participated in the two-day program. Day 1 they visited Fairhaven Retirement Community to interview older adults and day 2 the groups met with geriatric trained preceptors to formulate a care plan. The learning objectives for the pilot program were to (1) practice communicating effectively and empathetically with older adults in an institutional environment, (2) describe the importance of interdisciplinary teams in the care of older adults, (3) appreciate the differing perspectives, values, and experiences of professionals in other disciplines, (4) learn how to communicate as a team member to develop a simple care plan addressing issues from medical, emotional, social, environmental, and economic perspectives, and (5) reflect on one's own attitudes towards older adults, including caring for the chronically ill. After attending this activity, participants will be able to discuss procedures and lessons learned regarding student recruitment, curriculum development, unique challenges with interdisciplinary training, as well as program implementation and evaluation.

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THE HOME AS A VENUE FOR ACHIEVING CORE GERIATRICS COMPETENCIES

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Many medical schools have incorporated home visit programs with older adults in the preclinical years, programs that are resource intensive. While student and elder satisfaction with these programs is often reported, more formal outcomes are rarely assessed. As part of the 4-year longitudinal curriculum in geriatrics, pain management, and palliative care at the UMMSM, first-year students make three home visits to a well elderly volunteer in the community during which they practice communication and counseling skills. Specific learning objectives are formulated for each visit. Students undergo formal competency assessment on several of these objectives and must achieve a preset performance standard. Students not achieving this standard undergo remediation and reassessment. Core topics covered in the home visit program include the medical history, common chronic conditions, ADLs/IADLs, formal and informal support systems, nutrition and exercise screening, advance directives, warning signs of serious medical illness, emergency preparedness, and home safety assessment. Instructional activities helping students prepare for the home visits include a preceptor-led lecture and a small-group session, an online training module, and self-study materials. Two additional small-group sessions are conducted to debrief students and reinforce their learning. Over the past nine years, more than 1300 students have participated in the program. Results from our competency assessment allow us to document student learning. We believe that the home is an excellent venue for students to learn core geriatrics competencies and practice important communication and counseling skills with older adults.

CREATIVE APPROACHES TO PROVIDER EDUCATION FOR HEALTHY AGING

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Nevada Geriatric Education Center (NGEC) sponsored a series of lectures delivered by fellows in the University of Nevada School of Medicine geriatrics fellowship program. A study was designed to assess provider knowledge retention following the lectures. Simultaneous to the lecture series, NGEC faculty worked with fellows to develop presentation skills. Six presentations were conducted in 2008. Five were included in the study. Presentations provide an overview, clinical guidance, literature updates, and discussion on selected geriatric topics. Providers estimated that as many as 2,310 patients would benefit from knowledge learned and applied during the series; and 57% to 100% of providers indicated plans to use information to educate patients/clients. In order to assess whether practitioners retain specific content from the lectures, a four to six question quiz is sent several weeks after each presentation. Post-test scores have improved from the first session and are generally higher than 90%, indicating that attendees retain most of the pertinent material presented. Poor delivery and post-test results following the first lecture spurred NGEC faculty to implement several strategies (e.g., presentation tips given to fellows, fellows include test questions and answers during the presentation, a "dress rehearsal" for fellows to refine presentations). These capacity building activities have contributed to improved presentations, and value has been added to the series. Evaluation data indicate that the educational efforts of the NGEC contribute to practitioners becoming more knowledgeable of providing quality care thereby contributing to healthy aging for their patients.

CREATING A HEALTHIER LEARNING ENVIRONMENT FOR LIFE-SPAN LEARNERS

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Perceived “barriers” to learning and the perceived ability to learn new concepts can significantly impact older adults’ academic performance, their willingness to engage in life-long learning, and their general quality of life (e.g., Johnson, 2008). “Decrement stereotype threat belief,” or a personal belief that involvement in an educational experience confirms a negative stereotype (e.g., Steele & Ambady, 2006) was hypothesized to account for some adults’ evaluative anxieties and associated performance outcomes (study behavior, test scores). The purpose of the present study was to further investigate age- and diversity-related (e.g., “double jeopardy”) perceptions of testing and, specifically, math-related performance. The dependent variables consisted of studying behavior (estimated time, actual time), math test performance; and various evaluative and math anxiety reactions (e.g., test anxiety, social derogation, physical tenseness, cognitive obstruction, presence/impact of early “math-related” social role models). The total sample tested was $n = 120$. Racially and/or ethnically diverse “non-traditional” college (undergraduate) women ($n = 28$, ages 40 – 72; 49.9 (3.7)) and men ($n = 25$, ages 40 – 58; 43.6 (2.8)) were recruited from a large diverse mid-western university. A “control” group of younger women and men were also tested for study comparison purposes. Significant differences in reactions through interactions of age-level and gender (e.g., older women significantly higher in math-related anxiety), as well as age-level by race/ethnicity, will be presented in detail and have important implications toward the design of a “healthier” classroom environment for older learners. The impact of early gender socialization was a significant factor to also be discussed.

TRANSITIONING TRADITIONAL TEACHING: UTILIZING ONLINE MODULES TO INTEGRATE GERIATRICS ACROSS THE CURRICULUM

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Purpose: Currently, older adults have an estimated 11.7 contacts per year with physicians, compared to 4.8 contacts by adults under the age of 65. (Zulman, Estes, 2003). The 2008 IOM report documents the need to better prepare medical students to care for older adults. Geriatrics education must be interwoven through all disciplines and specialties. Better clarity of medical student geriatric competencies has been achieved with the 2007 AAMC/John A. Hartford Foundation Geriatric Consensus Conference. However, constrained curriculum, limited faculty time and/or geriatric content expertise along with competing educational priorities serve as barriers to integrating geriatrics within medical student education. . Methods: Recognizing the need for and barriers to geriatric curriculum, a geriatric education collaborative was developed to address the twenty six competencies (identified across eight general domains - Falls, Balance, Gait Disorders; Medication Management) developed at the 2007 AAMC/John A. Hartford Foundation Geriatric Competencies Consensus Conference. The collaborative identified difficult core concepts or gaps in required medical student courses/clerkships linked to the geriatric competency domains. Next, teaching methods were chosen to achieve competency performance within available instructional time including online modules. E-geriatrics modules were collaboratively developed and consist of case studies, text, video triggers, external resource links, a quiz and course evaluation. Results: A total of five modules have been developed (e.g. Bioethics, Psychiatry, Neurology, Biochemistry, Trauma – Resuscitation & Preoperative Medicine). 88% of students rated e-instruction “helpful/very helpful” in biochemistry and, 73% preferred the self paced and interactive on-line format to traditional neurology lecture. Conclusions: The Minimum Geriatric Competencies for Medical Students can be woven throughout medical school curriculum through a collabora-

tive faculty approach utilizing geriatrics to illuminate and reinforce difficult basic science and clinical concepts.

SOCIAL WORK STUDENTS WHO ARE INTERESTED IN WORKING WITH AGING: A PROFILE

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The National Institute on Aging has indicated that there will be an increased need for social workers working with our aging population. Data from the larger research project indicates that social work students had limited interest in working with aging. From the 1988 data set three of the four least desired populations to work with were aging, with Alzheimer’s disease rating the least desired population. Elder abuse ranked second and general geriatric service rated fourth least desired populations. The comparative study completed in 2007 indicated some improvement in the overall desire to work with aging but the category of geriatric/aging was still listed as the 4th least desired population. The data for this presentation is drawn from a survey of 282 second year MSW students from programs around the US. For this presentation an analysis was completed to determine if there is a profile of the students who reported having higher interest in working with aging. A Principal Component Analysis was run on those who indicated a desire to work with aging to determine if there were meaningful profiles. One component included positive loadings of four aging related variables “geriatric aging services” “elderly abuse” “Alzheimer’s disease” and “death and dying.” This component was labeled “Aging interest.” We used the “Aging interest” component in subsequent analyses rather than examining the four variables separately. The results of this analysis will be presented.

FEW AND FAR BETWEEN: GEROPSYCHIATRIC NURSING EDUCATION COURSE OFFERINGS IN THE US

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The National Institute of Mental Health predicts that by the year 2030, the numbers of older adults (age 65 and older) with mental illness will likely strain the nation’s health care system. As part of the Geropsychiatric Nursing Collaborative sponsored by the John A. Hartford Foundation and Atlantic Philanthropies, an exploration of current geropsychiatric nursing education in the US was performed. The overall purpose of the Collaborative is to identify methods of improving geropsychiatric nursing content in all levels of nursing education programs to better serve the mental health needs of older adults. A letter of inquiry was sent via the Internet to 242 US schools of nursing who claimed to offer geropsychiatric nursing content in their curricula. The letter stated the purpose of the investigation and requested any curricular information regarding the program’s geropsychiatric content. Data collection was conducted in 3 waves with 42 schools responding. Seven graduate courses and one undergraduate course dedicated to geropsychiatric nursing were identified. Extracted data from all schools that responded were analyzed for commonalities and specific strategies used in educating nurses about geropsychiatric issues. Specific data related to the integration of geropsychiatric nursing content and the amount of integration into the curricula, methods of content delivery to students, amount of clinical instruction, textbooks or other learning resources, and the geropsychiatric concepts included in the courses were compiled, systematically organized and reported.

QUALITATIVE ANALYSIS OF ATTRACTION TO AND LIVED EXPERIENCE IN UNIVERSITY-LINKED RETIREMENT COMMUNITIES: A LIFE-COURSE APPROACH

R.B. Meraz, *Leadership and Counseling, Eastern Michigan University, Ypsilanti, Michigan*

Higher education has a long history of responding to the needs of a diverse citizenry. While offering retirees and senior citizens opportunities for engagement on college campuses is not a novel concept, a new trend that of retirement living on campus is emerging. One of the more innovative ways higher education is engaging retirees is through the creative practice of university-linked retirement communities (ULRC). ULRCs are a relatively new in the world of retirement living and have been growing in popularity since the mid 1980s; ULRCs now exist on more than 50 campuses across the United States. The ULRC concept is one that meets both the needs of retirees and the university. This poster presentation will summarize the in-progress summary finding of dissertation research that involved visits to three unique ULRC's located in the Midwest, Northeast, and South. This research employed a qualitative, interpretive, ethnographic approach utilizing a series of individual life-history interviews, focus groups, observations, and artifacts as the main content for data analysis. The researcher will present insights on how the conceptual framework that drew upon psychosocial theories of aging including: activity, role, continuity and life course theory led to a deeper understanding of residents' attraction to and lived experiences retirement in a ULRC. The poster session is also intended to start a dialogue about ULRCs and the contributions they make to Third Age education and successful aging.

PAUL B. BEESON CAREER DEVELOPMENT AWARDS IN AGING RESEARCH: DOES GENDER IMPACT AWARD RECIPIENTS' CAREER GROWTH?

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In an effort to build leadership capacity in academic geriatrics, the Paul B. Beeson Career Development Awards in Aging Research Program is designed to facilitate the successful career development of physician-scientists conducting aging-related research. Similar career development programs have been reviewed in the literature, but few reviews consider the intersection of program participation and gender. This mixed-methods project explored the possible impact of gender on the experiences of the Beeson Award recipients, Beeson Scholars. It included content analysis of Beeson Scholars' survey responses to open-ended questions asking them to list factors they felt were helpful in advancing their careers or which slowed or derailed them from advancing at the rate they had hoped following their receipt of the Award. Their acquisition of NIH R01 funding as reported in the National Institutes of Health (NIH) Computer Retrieval of Information on Scientific Projects (CRISP) database subsequent to receipt of the Beeson Award was also analyzed. It was hypothesized the intense selectivity in finding top physician-scientists conducting aging-related research as well as anticipated research potential of Beeson Scholars would mean equal proportions of women and men received R01 funding. Beeson Scholars are generally successful in competing for NIH funding, but the likelihood of women obtaining funding is statistically significantly different than men. The survey sought to explain this variation; however, content analysis of responses did not provide statistically significant findings attributable to gender, although factors impacting career development of physician-scientists as reported by Beeson Scholars reflect existent themes identified in the literature.

JOB/WORKSITE FACTORS INFLUENCING OLDER HEALTHCARE WORKER TURNOVER

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This community-based pilot study will evaluate ergonomic workplace design in healthcare organizations using the Williamson Turn Stand

and assess the psychosocial aspects of individuals by examining the relationship between quality of work life and: job characteristics, social support and organizational characteristics. The study also will examine the relationship between turnover in health care organizations and: environmental worksite characteristics using the Williamson Turn Stand, job characteristics, social support, organizational characteristics and quality of work life. Findings from this study will contribute to our understanding of strategies to successfully recruit and retain older, experienced health care workers.

AN EXPLORATORY STUDY ON THE EMPLOYMENT BARRIERS OF KOREAN OLDER IMMIGRANTS IN LOS ANGELES

M. Rhee, I. Chi, *University of Southern California, Los Angeles, California*

With the rapid aging of the population in the United States and the nation's concern on the increasing costs of health care and Social Security, substantial amount of research has been done on the issue of how to recruit and retain older workers in the labor market. However, relatively very limited attention has been paid to the employment issues of ethnic minority older adults who often face dual risks of age and racial discriminations. For many sub-ethnic Asian Americans, not only exploratory studies are rare, but also they lose their uniqueness by often being lumped into Asians despite the fact that they are the most internally heterogeneous population groups. This study attempts to fill the research gap by exploring the employment experiences among Korean older immigrants in Los Angeles. According to the U.S. Census, there were about 70,000 Koreans in the U.S. in 1970s, but they are currently estimated at over one million with approximately 20% of them being over age 50. This study analyzes qualitative data of 36 Korean immigrants in Los Angeles who are 50 and above. The result of the study based on four focus groups, conducted separately for each gender of the employed and the unemployed, provides the comparison between gender and employment status in terms of employment barriers. The study also provides foundation knowledge both for practitioners and policy makers in developing culturally competent employment services by exploring the employment barriers Korean older immigrants face both at individual and social level.

THE INFLUENCE OF OCCUPATIONAL CONTEXTS ON RETIREMENT PLANS

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The aging of the baby boom cohorts may lead to shortages in labor supply among selected industries and thus enhance opportunities for older workers. On the other hand, occupational and job contexts may discourage workers from remaining in their jobs or in the labor force. Extending on Ekerdt's previous research on retirement plans using Health and Retirement Study data, we address the influence of selected occupational contexts (industry, perceived age discrimination) on retirement plans. Initial Multinomial logistic regressions relying on the first wave of the HRS (our final analyses will use waves 1-7), indicate that individuals employed in the manufacturing and transportation industries are less likely to opt for reduced work hours rather than stopping work altogether, whereas individuals in public administration are particularly prone to strive for reduced work hours, and those in agriculture are more inclined to never retire. Perceived peer pressure to retire at age 65 enhances the inclination to plan for job changes, whereas perceptions of fewer promotion opportunities for older workers in their firm tend to encourage workers to make retirement plans: they are less likely to indicate no plans and somewhat more inclined to change jobs. Lack of opportunities for older workers to move to a less demanding job in their firm leads to decreased plans to reduce work hours rather than stopping work altogether. These data demonstrate that work contexts

can shape retirement plans. Employers may need to change work contexts if they want to encourage older workers to remain in their firms.

UNDEREMPLOYMENT AMONG OLDER WORKERS IN THE UNITED STATES

J. Mutchler, A. Butt, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

As unemployment rates reach levels not seen in more than three decades, it is critical to evaluate how older workers are faring. Labor force statistics summarizing the status of older workers typically highlight the labor force participation rate as a measure of labor force attachment, and the unemployment rate as a measure of labor force adequacy. In isolation, however, these indicators are insufficient. They describe neither the health of a labor market with respect to older participants, nor the extent to which older workers are finding suitable employment. In this paper we build on research that tracks underemployment as an expanded conceptualization of labor force participation and adequacy. Underemployment is a concept that includes unemployment, as conventionally defined, but also includes discouraged workers and individuals who are working part-time involuntarily. This expanded conceptualization of labor market insecurity sheds new light on later-life work experiences. Using data from the Current Population Surveys for 1998-2009, we summarize underemployment patterns among individuals aged 50 and over in the United States. We compare these trends and patterns in underemployment to those characterizing the working-age population as a whole, as a means of evaluating the extent to which older workers are differentially exposed to risks of underemployment. Using standardization techniques to take into account the shifting demographic composition of the older workforce, we evaluate trends over time in underemployment among older workers.

WORKERS, WORK SUPPORT, AND DAILY WELL-BEING

J.D. Wong, D. Almeida, *Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Past studies have shown that low work support has been linked to increased risk of heart diseases and impaired mental health. Although it is important to consider the amount of work support received, it is as important to consider from whom work support is provided. This study examines the associations of type of work support (coworker, supervisor) and areas of daily well-being in a sample of 314 workers between ages 34 to 78 ($M=49.8$). Participants from the National Study of Daily Experiences (NSDE), which is a part of the National Survey of Midlife in the United States (MIDUS), completed telephone interviews about daily stressors, physical symptoms, psychological distress, and positive events over eight consecutive days. Controlling for household income and chronic health conditions, analyses revealed that type of work support differentially predicts areas of daily well-being. Older workers with high support from their coworkers were more likely to experience a positive event in comparison to their counterparts. In the area of supervisor support, males with low supervisor support were the most likely to experience a physical health symptom when compared to their counterparts. Findings suggest that the type of work support provided and individuals' socio-demographic characteristics are important in understanding daily well-being. Furthermore, these findings have implications for ways to improve the work environment.

SESSION 635 (SYMPOSIUM)

EFFECTS OF PERSONAL AND ENVIRONMENTAL FACTORS ON HEALTHY AND SUCCESSFUL AGING

Chair: C. Shawler, *University of Louisville, Louisville, Kentucky*

Discussant: D.A. Chyun, *New York University, New York, New York*

Successful aging involves adaptation to age related changes and creative understanding of the effects of personal and environmental factors such as culture, spirituality, race, age, gender, and social network. Under-

standing these factors can assist older adults to manage change and cope successfully so that their physical and mental functioning is enhanced. With increased awareness of the social, cultural, age, and gender issues, an environment can be created that is conducive for older adults to age successfully with improved levels of health. Nurse scientists have created knowledge that facilitates healthy and successful aging within multiple contexts and cultures. Spirituality of African American spousal caregivers was examined in the first study. Findings demonstrate an inverse relationship between spirituality and the length of time caregiving. In the second paper gender differences in self-rated health of elderly Korean immigrants was explored. Findings indicate that men had better self-rated health than women and women had higher prevalence of major health problems. The third paper examines the current health concerns of the oldest old – individuals who are aged 85 and older. The participants use creative approaches, despite limitations, to maintain social supports and community engagement. The final paper reports the results of a randomized control trial testing effectiveness of support group and exercises on cognitive and physical functioning of African American and Afro-Caribbean elders with mild to moderate dementia. Findings indicate how important differences in the groups affect health outcomes. These papers represent research conducted by participants of the Hartford Institute for Geriatric Summer Scholars Program.

SPIRITUALITY IN THE LIVES OF OLDER AFRICAN AMERICAN SPOUSAL CAREGIVERS

L. Parker, *Clayton State University, Morrow, Georgia*

This study is part of a larger study in which community dwelling older African American spousal caregivers completed in-home questionnaires on caregiver strain, spirituality and depression. The focus of this presentation is on data regarding spirituality. Thirty-eight participants completed the Spiritual Perspective Scale (Reed, 1968). One item from the scale explores the participants' views regarding spirituality. Descriptive statistics, correlations on study variables and scores from the SPS will be presented, along with themes from the transcribed text of participants regarding their perspectives about the meaning of spirituality in their lives. In this study participants rated their spirituality at 5.5 out of a possible 6 on a Likert scale indicating a greater spiritual perspective. There was an inverse relationship between spirituality and the length of time spent caregiving. Text transcription and emergent themes suggests that spirituality is extremely important in the lives of the spousal caregivers in this study.

GENDER DIFFERENCES IN HEALTH STATUS AMONG ELDERLY KOREAN IMMIGRANTS

M. Sin, *College of Nursing, Seattle University, Seattle, Washington*

Evidence increasingly shows that gender inequality is an important determinant of health status. The purpose of this cross-sectional study is to examine gender differences in self-rated health and health status of elderly Korean immigrants (EKI). A convenience sample of 88 EKIs (mean age: 75, $SD=6.48$, range 65-88) were recruited from senior centers and senior apartments in Washington state. Self-rated health was measured with a global Likert Scale of health (poor, fair, good, excellent) and health status with a structured questionnaire (lists of major health problems). In Chi-Square analysis, immigrant Korean men had better self-rated health than women ($X^2=10.8$, $p<.01$). Immigrant Korean women had a higher prevalence of major health problems (e.g., arthritis, headache, osteoporosis, falls, back pain, overweight) than immigrant Korean men ($p<.05$). More men were married living with spouse and had higher education than women. Careful examination of gender difference determining health status is an emerging priority to better manage health status among older adults.

CREATIVE APPROACHES TO HEALTHY AGING: ADVICE FROM THE OLDEST OLD

K.L. Mauk, C.K. Hendrix-Prater, A.J. Kennel, J. Francis, *College of Nursing, Valparaiso University, Valparaiso, Indiana*

The fastest growing part of the American population is adults aged 85 years and over. As life expectancy has increased, this cohort, previously considered the “frail elderly”, has changed with regard to their independence, sense of well-being, and health. A pilot study was conducted to explore the current health concerns of the oldest old group. A convenience sample of 12 volunteers in Northwest Indiana, ages 85 – 99, with an average age of 89.4, was interviewed. Qualitative data analysis revealed that this older cohort had developed specific positive coping mechanisms that enhanced their aging process, including: reliable social support, ways to remain engaged in the community despite limitations, and participation in certain common activities. The purpose of this presentation is to discuss the creative approaches to healthy aging provided by the participants in this study. Specific advice from study participants about staying healthy in old age will be discussed.

HEALTH, LIFESTYLE PRACTICES, HEALTH BELIEFS AND FAMILY SUPPORT OF BLACK ELDERS IN SOUTH FLORIDA

F. Keane, *Nursing, Florida International University, Miami, Florida*

The purpose of this randomized, controlled study is to test the effectiveness of a support group intervention, and exercise on cognitive and physical functioning; and to identify factors that affect these outcomes in a sample of African Americans and Afro-Caribbean elders with mild to moderate dementia. The sample will consist of 100 mildly or moderately impaired Afro-Caribbean and 100 mildly or moderately impaired African American elders. Before participating in the study the participants will be screened using the Short Portable Mental Status Questionnaire, A Functional Activities questionnaire, and the Clock Drawing Test. The independent variables are yoga exercise and support group participation. Dependent variables include cognitive and physical functioning. Behavioral outcomes will be improvement in mood and self esteem. Resulting data will allow examination of differences in these two ethnic subgroups and ethnic group factors that may interact to affect individuals’ cognitive and physical health in late life. Objective: After attending this activity the participants will be able to identify health differences for African American and Afro-Caribbean elders and factors that influence their health outcomes. Objective: After attending this activity the participants will be able to identify health differences for African American and Afro-Caribbean elders and factors that influence their health outcomes.

SESSION 640 (PAPER)

INTERGENERATIONAL EXCHANGES

COGNITIVE ACTIVITY AND COGNITION FUNCTION IN LONG-LIVED OLDER ADULTS AND THEIR ADULT OFFSPRING

C.A. Berg, K. Smith, *Psychology, University of Utah, Salt Lake City, Utah*

The relation between cognitive activity (Wilson et al., 2002) and multiple metrics of cognitive function (WAIS Digit Span, Memory, Boston Naming Test, Verbal Meaning) were examined in 105 long-lived adults (M age=93.4, SD=3.9) and their children (M age=64.1, SD=7.7). Significant group differences were found on (1) all measures of cognitive function, with the long-lived adults performing more poorly than their children, and (2) for the level of cognitive activity, with long-lived adults reporting less cognitive activity. For the long-lived adults, higher cognitive activity was associated with greater cognitive function across cognitive measures, with these associations reduced or not significant for their children. Although significant family associations for cognitive function were found, no significant association between parent and child

cognitive activity was found ($r=.08$). The results are interpreted in the context of potential methodological, cohort, and family factors associated with the measurement of cognitive activity in young-old and old-old adults.

MOTHER’S SUPPORT FOR EDUCATION: INTERGENERATIONAL SOCIALIZATION AFTER DAUGHTERS’ RETURN TO SCHOOL

M. Plikuhn¹, J. Suito¹, R. Powers², *1. Department of Sociology, Purdue University, West Lafayette, Indiana, 2. East Carolina University, Greenville, North Carolina*

This paper uses data from a 25-year study of 37 married mothers who returned to college in the early 1980s to study the ways in which adult children influence their parents’ attitudes. In recent years, scholarship on attitude formation has shifted from a focus on parents’ socialization of young children to exploring the ways in which family members serve as agents of socialization for one another across the life course. This paper investigates the ways in which married daughters who entered college while raising small children influenced their mothers’ attitudes regarding women’s pursuit of higher education while married and raising children. Preliminary analysis of data collected at the time of the entry into college, a year later, 10, and 25 years later suggests that regardless of mothers’ own educational attainment, changes in their support for their daughters return to school was shaped by the daughters’ educational and career successes.

A DYADIC ANALYSIS OF BEHAVIOR PROBLEMS AMONG ADOLESCENTS RAISED BY GRANDMOTHERS

M.L. Dolbin-MacNab, J. Savla, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Among grandparents raising grandchildren, grandchild behavior problems are frequently cited as a major source of stress and have been linked to compromised grandparent well-being. In response to these linkages and to evidence that children raised by grandparents often experience serious physical, emotional, and behavioral problems, researchers have begun to examine grandparent and family factors associated with grandchildren’s behavior problems. These studies indicate that parenting stress, poor grandparent mental health, and contextual stressors may predict grandchildren’s behavior problems. However, little is known about characteristics of the grandchild that predict their behavior problems. Further, studies of grandchild adjustment have relied on grandparent reported data and have not attended to the interdependence of grandparents and their grandchildren. To develop a more systemic understanding of grandchild behavior problems, this study is the first to collect reports from grandmother-grandchild pairs for the purpose of examining within and between dyad factors that are associated with adolescent (ages 11 to 18) grandchildren’s behavior problems. Using path analysis with these distinguishable dyads, we examine within-dyad predictors of grandchildren’s behavior problems including grandchild affect regulation and attachment to the grandmother, as well as grandmother mental health, coping, and parenting stress. We also examine between-dyad predictors such as family resources and family functioning. Variations based on grandchild gender are also considered. Results of this study highlight the value of using dyadic data for understanding the mediating role of grandchild characteristics and grandparent stress on grandchildren’s adjustment. Findings have implications for interventions for custodial grandparents and grandchildren alike.

THE ROLE OF RELIGIOUS SIMILARITY IN THE QUALITY OF PARENT-CHILD RELATIONS: DIFFERENCES WITHIN FAMILIES AND BETWEEN RACES

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Recent within-family studies have found perceptions of similarity to be one of the most powerful predictors of mothers’ closeness to adult

children. Further, these patterns are the same for both Black and White mothers' differentiation. However, this line of research has focused on perceptions of general similarity of outlook. We contend that the salience of some dimensions of similarity may differ by race. Specifically, we argue that because of the higher levels of religiosity and religious participation among Black than White women, religious similarity will play a larger role in closeness between Black than White mothers. This paper uses data on 591 White and 159 Black mother-child dyads nested within 290 families collected as part of the Within-Family Differences Study to examine this question. Preliminary analyses suggest that religious similarity predicts closeness as reported by both mothers and children; however, consistent with our expectations, both similarity of religious affiliation and religious participation played a larger role in the intergenerational relations of Black than White parents and children.

LINKED LIVES BEYOND ADJACENT GENERATIONS: FILIAL RESPONSIBILITY FOR AGING PARENTS FROM THE GRANDCHILD PERSPECTIVE

P. Oyama, M. Silverstein, V. Bengtson, *Gerontology, University of Southern California, Los Angeles, California*

Research suggests that intergenerational family relationships may shape individual conceptions of filial responsibility for the long-term care of the elderly, but few studies have examined this beyond adjacent parent-child dyads. This study examined young adults' attitudes toward filial responsibility for aging parents in relation to the quality of the grandparent-grandchild relationship. Data used were from young adult (16-24) participants pooled across three waves (1994, 1997, 2000) of the USC Longitudinal Study of Generations. The grandchild perspective was used to construct grandparent-parent-child triads ($N = 400$) consisting of responses about either a maternal grandparent and mother ($N = 225$) or paternal grandparent and father ($N = 175$). Filial responsibility was measured using a 6-item Likert scale indicating the amount of responsibility adult children should have for elderly parents in need. Quality of intergenerational relationships was measured using Bengtson's affectual solidarity scale. Multivariate (OLS) regression models revealed that independent of affection for parents, affection for grandparents had a significant positive association with young adults' filial responsibility attitudes. Gender differences in filial responsibility were not found. In addition to the parent-child relationship, the quality of the grandparent-grandchild relationship may also encourage future support to elderly parents, which suggests that the lives of family members are linked across relationships that extend beyond adjacent generations.

SESSION 645 (PAPER)

NURSING HOME CARE

MOBILIZING CARE RECIPIENTS VOICES AND THE MEANINGS OF CARE: AN ACTION RESEARCH PROJECT

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Competence, autonomy and relatedness have been identified as three basic human needs (Deci & Ryan, 1985). These needs do not change or atrophy with age, but may become more difficult to realize in old age. Indeed, these three needs correspond to what Bill Thomas (1996) identified as the "three plagues" of nursing home life – boredom, helplessness, and loneliness. The culture change movement in LTC has as its self-proclaimed goal to ameliorate these plagues and to create a Life Worth Living (Thomas 1996) in the daily life experiences of residents living in LTC. One of the goals of culture change is to redefine the cultural and societal meaning of old age in a way that restores full social participation to elders, thus, nourishing the potentials for competence and providing opportunities for autonomy and relatedness to elders living in LTC is recognized as a never-ending task. Yet, although the efforts of the culture change movement have been great, the heavily regulated

and constantly demanding total-care milieu of LTC continues to fall short of the ambitious ideals of full participation for elders as active agents in quality care and quality of life. The primary goal of this research project is to utilize the methodology of Participatory Action Research as the primary vehicle to bring residents and the frontline staff who care for them into the process of culture change as active agents. This approach will involve operating Action Research Consortium (ARC) groups in a LTC facility in Northern Ohio. We believe that this approach can add value to the organization, to the culture change process and to the lives of residents living in nursing homes. Results of the action research process as well as outcomes will be presented.

THEMES OF CULTURE CHANGE: PRELIMINARY RESULTS OF AN ETHNOGRAPHIC CULTURE CHANGE EXAMINATION

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Supported by CMS and advocacy groups, increasing portions of the nursing home industry have turned to culture change, a system-wide organizational change strategy that prioritizes patient-centered care. Although there have been limited studies of its outcomes, there have been few studies of the culture change effort itself. This presentation describes preliminary results of an ongoing ethnographic study of culture change in a community nursing home. Data consists of qualitative interviews with leadership team members; data collection has been underway for 1.5 years and is guided by the grounded theory approach. The sample is multidisciplinary and currently includes recurring interviews with 23 individuals and ethnographic observations. Preliminary analyses have yielded three main themes. First, we describe the roles that optimism, labeling and fear play in the work experiences of facility leaders. Second, we describe the process by which the leadership team sets priorities regarding the strategic implementation of culture change initiatives, and degree to which these specific initiatives meet with challenges and/or success. Specific initiatives that are addressed in this study include decentralization of the MDS process, implementing Learning Circles, decentralization of the activities program, and leadership training. Third, we describe the role of race and proxies of race as facilitators and barriers to culture change; diverse perspectives serve as a facilitator, whereas communication difficulties serve as a barrier. Finally, we describe the role of the upper management in leading culture change, their motivators, their actions, and the factors that affect their decision to persevere in the face of enormous challenge. Religious commitment, the belief that change is necessary for marketing success, and a focused commitment to seeing the change through to success are some of these factors.

FACILITATING TRANSFORMATION: THE TOOLS AND PROCESSES USED IN LONG-TERM CARE CULTURE CHANGE

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Culture Change, the process of transforming a long-term care facility from operating under a medical model of care philosophy to operating under a holistic philosophy in a resident-centered care manner, focuses upon recreating long-term settings. This process of transformation involves an array of efforts aimed at changing the habits and assumptions of long-term care practice to support and maximize resident strengths (Cohen & Eisdorfer, 2001). Currently little has been developed on the role the physical environment plays in this transformation (Shields and Norton, 2006). Although making changes solely in the physical environment does not bring about culture change (McNamara, 1999), this research reveals that placemaking (the in-depth processes

of creating new or re-creating physical environments) may play a more important role in creating culture change than previously acknowledged. Using a systemic approach employing content analysis of an extensive literature review and in-depth case studies, this presentation presents insights into the complex, organic and lengthy process of culture change as it occurs within long-term care. This presentation offers a conceptual model for considering the physical setting as an integral part of a cultural milieu and highlights the fundamental hidden role design plays in culture change. In addition, this presentation will emphasize the need for congruence between physical, social, and organizational environments. Attendees will learn emerging conceptual frameworks that successfully guide culture change efforts and decision-making processes as well as the over 300 tools and actions that long-term care organizations used to facilitate transformation of their facilities into culture change communities.

MEDICAID LONG TERM CARE HOME AND COMMUNITY BASED SERVICES FOR THE ELDERLY: TRENDS IN PROGRAMS AND POLICIES, 1999-2006

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In response to consumer demand, the Supreme Court decision in the Olmstead case and the New Freedom Initiative, states have unevenly expanded combinations of three Medicaid home and community based services (HCBS): home health, state plan personal care services (PCS), and 1915(c) waivers. By 2006, the federal-state Medicaid program paid for 40 percent of the nation's estimated \$178 billion total long-term care (LTC) expenditures while institutional care (e.g., nursing homes) consumed 60 percent of those expenditures. As 41 states and DC project budget deficits in FY 2009 and beyond, the Deficit Reduction Act (2005) reflects growing concerns about the need to preserve and expand Medicaid HCBS and the need for information on program and policy trends. This paper draws from a unique national dataset to present the latest trends in participants, expenditures and policies for the three Medicaid HCBS programs serving the elderly. While data for 2006 show a steady increase in participants and expenditures, these growth rates have slowed since 2001. Inequities in access to services and limited funds have also resulted in unmet needs for HCBS among the elderly. Findings from the survey of policies used in the programs in 2008 show that states are increasing the number of waiting lists for elderly waiver services even as the number of available "slots" increases. Cost caps such as service and cost limits are also used in almost half the state plan personal care programs and almost a third of home health programs.

PRELIMINARY FINDINGS FROM MINNESOTA'S NURSING HOME PERFORMANCE-BASED INCENTIVE PAYMENT PROGRAM

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Minnesota's Nursing Home Performance-Based Incentive Payment Program (PIPP) supports provider-initiated projects aimed at improving the quality of nursing home care. Projects lasting 1-3 years are selected through a competitive process and funded for up to 5% of the daily per diem rate. Minnesota has funded 45 projects representing 160 facilities and \$23 million annually. Projects address areas such as falls, wounds, mobility, incontinence, pain, resident-centered care, and transitions from nursing home to community. In order to better understand the experiences of providers participating in the PIPP program, semi-structured interviews were conducted with project leaders. Leaders reported that project development was often data-driven, focused on current quality problems, and sensitive to cost and sustainability limitations. Leaders frequently reported extending quality improvement

beyond the targeted program area to improve resident quality of life overall. Organizational benefits included an improved public image, increased staff trust and cooperation, improved efficiency, and the ability to apply knowledge and skill obtained through PIPP projects to other challenges within the facility. There were also challenges. Staff members were at times hesitant to alter long-standing routines. Costs, especially those of staff training, often exceeded budget expectations. Sustainability of improvement was also a major concern. The relatively short duration of projects may not be sufficient to see improvement in quality indicators. Leaders expressed a need for learning more about generalizable models of success and noted the importance of disseminating their PIPP experiences. The experiences of PIPP leaders can be a model for others seeking to promote nursing home quality.

SESSION 650 (PAPER)

RESEARCH METHODS FOR ADVANCING AGING RESEARCH

USING ACTION RESEARCH IN A RESIDENTIAL CARE HOME FOR OLDER PEOPLE: LESSONS LEARNT - STRENGTHS AND PITFALLS

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The strength of using action research methodology rests in its potential to enable the researcher and participants to obtain systematic understanding of a setting in which a study is undertaken. As participants become co-researchers, a process of working together in partnership with the researcher becomes the ultimate goal. Together they explore, collectively self-reflect and adopt a more critical and creative stance to improve practice (Kemmis & McTaggart, 1988). Set in the context of Hong Kong, an action research study to explore the quality of life of older people in a subsidised residential care home was conducted. A triangulation of data collection methods was used: namely, participant observation, field notes, and semi-structured resident and staff interviews. Participants were encouraged to identify quality aspects and practices of the home that were important to them. Through a period of working in partnership with staff in groups, a programme for change initiatives was developed. Features of the physical setting and staff practices that require improvement were selected and addressed. Improved changes to the home were brought about by negotiating, planning workshops and conducting informal discussion groups with staff of all grades. Drawing upon the 12 months of data collected from 40 residents and 37 social care, nursing and care staff, this presentation will review on the strengths and pitfalls of undertaking an action research study in a large and hierarchical residential care home context. The impact of bringing about change to the care home and effects upon staff and residents will also be highlighted.

REACHING HARD-TO-REACH OLDER ADULTS IN BEHAVIORAL AND SOCIAL SCIENCE RESEARCH

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Diverse bodies of research underscore the vulnerability and marginalization of many groups of older adults, including those who are affected by substance abuse, incarceration, mental health problems, and longstanding poverty, and those who are lesbian, gay, bisexual or transgendered. While many behavioral and social scientists are committed to involving these and other groups of vulnerable older adults in research, these groups of older adults are often hard to reach. The presenters draw upon their own research experiences and a review of relevant literature to provide practical strategies to reach and engage hard-to-reach populations of older adults in research. At the conclusion of this presentation, attendees will be able to identify specific strategies to: 1) reach and

engage marginalized and vulnerable groups of older adults in behavioral and social science research; 2) facilitate engagement with research sites; 3) coordinate study activities with research site staff; 4) directly reach vulnerable groups of older adults outside of an agency setting; and 5) facilitate the institutional review board process, particularly when the research focuses on older adults who may be considered vulnerable by institutional review boards. This presentation is especially well-suited to early stage scholars who are seeking practical steps to move their qualitative and quantitative research with vulnerable older adults forward.

EXPLORING RELATIONSHIPS AMONG AGING GROWTH PROCESSES USING THE STRUCTURAL EQUATION GROWTH MIXTURE MODEL

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Longitudinal models such as the growth model allow researchers to test hypotheses about aging processes. Mixture models provide ways to account for unobserved heterogeneity which can lead to incorrect conclusions if left unaddressed. Unobserved heterogeneity can result from unobserved groups or latent classes. Growth mixture models (GMM) combine the growth model and mixture models. The GMM can be used to test hypotheses about unobserved aging trajectory groups. The GMM can be further extended to model the relationship among different growth processes with unobserved aging trajectory groups using the structural equation growth mixture model (SEGMM). Using data from the Notre Dame Longitudinal Study of Aging, the relationships among the aging processes stress, depression, life satisfaction, hardiness, and social support are explored using the SEGMM. In this didactic work, the steps for fitting a SEGMM are detailed. Initial steps should be done separately for each aging process (e.g., stress, life satisfaction, etc.). These steps include exploratory data analysis, the checking of items and/or scales, testing for measurement invariance across time, exploring appropriate shapes for aging trajectories (e.g., straight line or bounded curves), model identification, and estimating the number of unobserved aging trajectory groups. Once appropriate models are developed for each aging process, it is shown how hypotheses about relationships among aging processes are translated into testable models. Ways of addressing relationships between aging processes with different numbers of unobserved aging trajectories and/or different longitudinal data collection schedules are illustrated. Methods of model comparison and model selection are demonstrated.

INNOVATIVE TRANSLATIONAL RESEARCH IN GERONTOLOGY: CORNELL INSTITUTE FOR TRANSLATIONAL RESEARCH ON AGING

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In 2003, we began development of an innovative pilot studies model designed to foster partnerships between university researchers and agencies serving older people in New York City through the Cornell Institute for Translational Research on Aging (CITRA), an Edward R. Roybal Center. Professional development of researchers for projects that benefit frontline service agencies is critical for translating scientific research into evidence-based practice benefiting older adults. In this presentation, we will report on achievements, challenges, and lessons learned during the first six years of CITRA, and outline what we believe are the best practices for developing and supporting investigators in community-based research. Our pilot studies program required an infrastructure that supplemented individual pilot investigator efforts with centralized support resources to assure the proper implementation and dissemination of the research. Necessary components of the centralized resources included core staff, extensive time commitment from senior investigators to assist with IRB approvals and proposal writing, and an active community capacity-building program. Two formal seminars that attracted experienced investigators, junior faculty, and graduate students

were critical parts of the infrastructure. The program resulted in 50% higher investigator productivity, defined as proposal and peer-reviewed article success, compared to an earlier, conventional pilot program that did not have supporting educational and monitoring infrastructure. For the next five years, CITRA will expand to include two additional academic and medical institutions in New York City, aided by support from the Weill Cornell Translational Science Center. Implications for developing gerontological and geriatric researchers through CTSA's will be discussed.

HETEROGENEITY IN SELF-REPORTED LIFE SATISFACTION: RELATIONSHIPS WITH AGE AND PERSONALITY ARE NOT UNIFORM

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This study aims to contribute to the resolution of the well-being paradox, that is, the fact that relationships between objective living circumstances, including age, and life satisfaction are typically weak. It challenges the assumption that relationships between life satisfaction and living circumstances are uniform and apply to all individuals in the same manner. Based on mechanisms of self-evaluation, we predict meaningful heterogeneity in a quality of life (life satisfaction) measure; that is, the need to distinguish subgroups within the overall sample. Within one of these two subgroups, the participants' age explained substantial parts of variance in life satisfaction scores. Different traits of personality predicted high scores of life satisfaction within each of the two groups. A match between personality traits (the Big Five) and the most relevant sources of life satisfaction predicted higher levels of overall life satisfaction. Self-deception and lifespan theory provide a useful interpretive framework for these results.

SESSION 655 (SYMPOSIUM)

SOCIAL INDICATORS OF DISEASE RISK AND DISEASE MANAGEMENT IN LATE LIFE

Chair: M. Franks, *Purdue University, West Lafayette, Indiana*

Discussant: L. Wray, *Pennsylvania State University, University Park, Pennsylvania*

The risk of chronic disease increases with age, and many older adults manage at least one chronic condition each and every day. Poor disease management can cumulatively, and sometimes irreversibly, affect the health outcomes of older adults. The five papers assembled for this symposium illuminate how individuals' station in life (e.g., gender, socioeconomic status, marital status, age) shapes their own and their social partners' attitudes, perceptions, beliefs and behaviors in the prevention and management of chronic illness in later life. Our first two papers use data from the Health and Retirement Study to explore social and behavioral factors that increase older adults' risk for disease and disability. One paper investigates socioeconomic and demographic differences in risk factors for cardiovascular disease. The second paper examines biobehavioral (e.g., diet, exercise) and psychosocial mediators (e.g., self-efficacy, family support) that explain gender differences in long-term physical disability patterns of women and men with type 2 diabetes. Our next two papers investigate the role of married partners' beliefs and interactions in the management of diabetes. One paper focuses on the effects of spouses' diet-related control amid partners' perceptions of the necessity of spouse involvement in one another's health (dyadic appraisals). The second paper examines spouses' perceptions of partners' illness as a predictor of their provision of diet-related support and control. Our final paper is a qualitative examination of age differences in attitudes and beliefs about managing diabetes among older adults and their physicians, and the influence such attitudes and beliefs may have on medical encounters.

GENDER DIFFERENCES IN PHYSICAL DISABILITY IN ADULTS LIVING WITH TYPE 2 DIABETES:

BIOBEHAVIORAL AND PSYCHOSOCIAL MEDIATORS

C. Chiu, L. Wray, *Penn State University, University Park, University Park, Pennsylvania*

Differences in physical disability between adults with and without diabetes were more evident in women than in men. The present study aims to test if that difference can be attributed to biomarkers, self-care behaviors, and psychosocial well-being. Data on 1,619 adults living with type 2 diabetes from the U.S. nationally representative Health and Retirement Study and diabetes-specific mail survey were used. Findings indicated that although women had better diet and blood glucose self-monitoring behaviors than did men, they had less favorable levels on BMI, HbA1c, blood pressure, early complications, exercise behaviors, perceived control, self-efficacy, coping, depressive symptoms, and family support than did men. The use of structural equation modeling revealed that biological and behavioral factors directly and completely mediate the gender differences in physical function; psychosocial factors, although not directly account for the gender-disability relationship, made indirect contribution in the link.

DYADIC APPRAISALS OF SPOUSE INVOLVEMENT AND DIABETES MANAGEMENT

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Many individuals turn to their spouse as they manage a chronic illness. When spouses exert control to improve patients' illness management, their efforts sometimes elicit the opposite response resulting in poorer adherence. Given mixed findings for the effect of social control, we examined dyadic appraisals of spouse involvement as a moderator of the association between spouse control of patients' dietary behaviors and patients' outcomes (diet adherence, well-being) among couples where one partner has type 2 diabetes (N = 136). In couples with a shared appraisal affirming spouse involvement, dietary adherence was greater among patients reporting more diet-related spouse control. However, higher spouse control was associated with lower marital satisfaction, and dyadic appraisals did not moderate this association. Findings suggest that spouse control can facilitate patient adherence when partners share the appraisal that one spouse should be involved in protecting the health of the other, but may interfere with marital satisfaction.

SPOUSES' PERCEPTIONS OF DIABETES AND INVOLVEMENT IN PATIENTS' DISEASE MANAGEMENT

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Among individuals with chronic illness, spouses are often the primary source of support and control (influence) for self-management behaviors. Spouses' involvement in patients' disease management may be affected by their perceptions of illness. In this study of patients with type 2 diabetes mellitus (T2DM) and their non-diabetic spouses (N = 119 couples), we examined the effects of spouses' perceptions of T2DM as chronic (i.e., chronic vs. acute) and cyclical (i.e., cyclical vs. constant) on spouses' provision of support and control for patients' dietary adherence. Perceiving T2DM as more chronic was associated with spouses' providing less support and less control. Additionally, among spouses who viewed T2DM as constant, control decreased as a function of perceptions of chronicity. In contrast, among spouses who viewed T2DM as cyclical, there was no relationship between chronicity and control. Findings reveal the importance of spouses' perceptions of patients' illness for spouses' involvement in patients' disease management.

AGE DIFFERENCES IN ATTITUDES AND BELIEFS IN TYPE 2 DIABETES MANAGEMENT

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An effective physician-patient encounter is of paramount importance in the treatment of type 2 diabetes (T2DM). The purpose of this ongoing study is to identify physicians' and patients' attitudes and beliefs in the management of T2DM. A purposive sample of 24 patients (83% White, 50% male, 59±8 years old, 11±4 years with T2DM, A1c=8.0±1.1%) and 13 physicians (92% White, 62% male, 51±8 years old, 23±9 years in practice) participated in semi-structured interviews. Transcribed interviews were coded by 4 researchers using content analysis. Findings revealed that older patients (≥60 years) described a more passive role in their management and expressed greater self-blame for unmet treatment goals. Older physicians (≥55 years) described T2DM as a progressive, chronic illness, acknowledging that despite patients' best efforts diabetes may worsen over time. These findings indicate that age differences in attitudes and beliefs may contribute to medical encounters that support or impede diabetes self-care.

THE SOCIOECONOMIC AND DEMOGRAPHIC DISPARITIES THAT ARE ASSOCIATED WITH CARDIOVASCULAR RISK FACTORS

K.R. Jenkins, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Cardiovascular disease (CD) is the leading cause of death in the U.S. To better understand important disparities in CD, we use publicly available data from the 2006 wave of the HRS to investigate the effects of socioeconomic and demographic characteristics on cardiovascular risk factors (CRF). With a sample of 8,392 older adults, we used multinomial logit models to predict the odds of having 0, 1-2, or 3+ CRF separately for men and women. CRF are defined using HDL cholesterol, Hemoglobin A1c, waist circumference, and blood pressure. For men, being African American and having lower educational attainment makes one more likely to have 1-2, or 3+ CRF. For women, being African American, having lower educational attainment and income makes one more likely to have 1-2, or 3+ CRF. The implications of these results are discussed in terms of the potential role that targeted interventions have for decreasing CRF and improving diseases.

SESSION 660 (POSTER)

SUCCESSFUL AGING

MANAGING POOR SLEEP IN LATER LIFE: INTERPRETING OLDER PEOPLES' ATTITUDES TO SLEEP MEDICATION AND SLEEP REMEDIES

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Background: Traditionally sedative hypnotics have been prescribed to older people who report difficulty sleeping, but increasingly alternative solutions are being sought for poor sleep, as it is recognized the benefits of hypnotics are outweighed by the potential risks, such as an increase in falls. Aims and Methods: This paper offers an interpretation of older peoples' attitudes to sleep medication and remedies through qualitative interviews (n=62) with older people living in the community. Results: All respondents had a PSQI (Pittsburgh Sleep Quality Index) score of > 5, an indicator of clinically poor sleep. However, most of the older people would not consider going to their doctor for help with their sleep. Those who did, and who were prescribed sleeping medication, rarely took it, or discontinued use after a short period of time. Older people reported two concerns about sleeping medication, (a) that the effects of the medication would continue into the day, (b) that they would become reliant on them. Alternative, more 'acceptable' medica-

tions included painkillers, antihistamines, or over the counter solutions, such as herbal remedies. Conclusions: Older people place great emphasis on being in control of their daily lives, so they may only seek professional help when they consider their poor sleep interferes with that. It is therefore important to identify the attitudes older people have towards solutions to sleep problems, and recognize older peoples' emphasis on active living, if these solutions are to be effective. The research is supported by the New Dynamics of Ageing initiative (RES-339-25-0009).

EFFECTS OF VOLUNTEERING ON THE SELF-RATED HEALTH OF OLDER ADULTS

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There is growing evidence supporting the positive effects of engagement in productive activities on the well-being of older adults. This paper aims to examine the association between older adults' self-rated health and volunteerism, with a focus given to the role of older adults' educational attainments. The present study is based on 368 adults aged 60 and older from the first (1995/1996) wave of the National Survey of Midlife Development of the United States (MIDUS), a nationally representative sample of adults aged 25-74. Ordered logistic regression analyses indicated that volunteers who have some college or more education show a positive association with self-rated health ($OR=2.05$, $95\% CI=1.15, 3.65$), while there is no significant association between volunteering and self-rated health for those who have less than high school education. These results support the hypothesis on differential effects of volunteering on perceived health depending on older adults' educational attainments.

ELDER PERCEPTIONS OF HIGHER EDUCATION AND SUCCESSFUL AGING

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There is a growing trend of colleges and universities to affiliate with retirement communities, often to enhance revenue sources. Little is known of the effect of this emerging phenomenon on the aging processes of elders living and learning on a college campus. This phenomenological study used focus group methodology to collect in depth interview data from a group of 31 elderly residents of a college-affiliated retirement community. Residents in this setting are required to complete 450 hours of continuing education per year. This continuing education requirement can be met through either age-segregated classes with other residents; or, intergenerational courses at the college with traditional aged students. The specific aims of this study included understanding the potential effects of the retirement community and campus settings on elders' ability to age successfully; and the impact of intergenerational engagement on the aging process. Findings from this study confirm that there are many opportunities which promote successful aging of elders in a higher education affiliated retirement community. Participants reported that successful aging is enhanced by the safety of the setting and access to: continuing education; dining facilities; socialization; intergenerational engagement; and general disposition of intellectualism in the setting. In addition, the educational requirement results in self-selection of residents with interest in intellectual matters and continued learning that is then accentuated within the community culture. Conclusions include recommendations that more institutions of higher education should consider similar models, with careful attention to issues of enhancing both funding sources and opportunities for diversity within the program.

SOCIAL INTEGRATION, SELF-RATED HEALTH, AND MORTALITY: A LONGITUDINAL STUDY OF ELDERLY JAPANESE

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Do elderly Japanese people rate their health more highly and have a greater chance of surviving over the short term when they are more socially integrated rather than isolated? If so, then which social roles are crucial in conveying these advantages? These questions are answered in our analysis of Wave 1 and Wave 2 (1999 and 2001) of the Nihon University Japanese Longitudinal Study of Aging. Having more social roles, especially being a worker or a participant in an extrafamilial social group, was associated with better self-rated health among Japanese elders in 1999. Better self-rated health in 1999 boosted the odds of surviving over the next two years to participate in the 2001 wave (versus dying between the waves). We discuss how the present study updates, extends, and compares with similar works in Japan (Sugisawa et al. 1994) and upstate New York (Moen et al. 1989) and suggest directions for public policy and future research on promoting healthy aging in Japan.

BEYOND INDIVIDUALS: EFFECTS OF NEIGHBORHOODS ON OBESITY

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Rates of obesity have increased exponentially over the past several decades such that 33% of adults over the age of 60 are now obese. While demographic, SES, and genetic factors influence obesity, the rate of growth of this epidemic renders implausible the likelihood that the trend can be explained by biology or genetics alone. We examine the extent to which neighborhood context affects BMI by linking interview data from 5,688 community-dwelling people aged 50 to 74 living in New Jersey with Census-tract data. Results indicate that there are significant gender differences in the influence of neighborhood characteristics. For women, in addition to education, income, and race (measured at the individual level), lower neighborhood SES, and less street connectivity (more streets, fewer nodes) predict BMI. For men, only education (measured at the individual level) predicts BMI. Findings suggest the important role played by neighborhood characteristics, especially for understanding obesity among women. Results are interpreted in terms of the need to develop environmental solutions to help stem the obesity epidemic.

ENGAGEMENT WITH LIFE: ACTIVITY PARTICIPATION AS A PREDICTOR OF SUCCESSFUL AGING AND QUALITY OF LIFE

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Introduction. This study examined the relation of long-standing occupation to successful aging and quality of life (QOL). Long-standing occupation was participation in a particular activity for a period of five years or more. QOL was a positive state of well being that was an inherent factor of successful aging. Successful aging was defined as continued good health and well being in concert with high function and active engagement with life (Row & Kahn, 1999). Engagement with life is involvement in leisure, social, and productive activities. QOL was defined as overall positive well being that included health status and life contentment. Engagement in long-standing occupation provides seniors with a vehicle for staying active and socially connected. Method. Correlational procedures were used to collect data on long-standing occupation, successful aging, and quality of life in a sample of 276 community-dwelling older adults. The Long-Standing Occupation Measure ($r=.81$) was used to measure activity participation. The Successful Aging

Profile ($r=.84$) was used to measure successful aging. The Quality of Life Scale ($r=.92$) was used to measure QOL. Regression analyses were used to determine predictors of successful aging and QOL ($p < 0.05$). Results. Findings indicated that long-standing occupation is a significant predictor of successful aging and quality of life. Productive occupation was a significant predictor of both QOL and successful aging. Conclusion. This sample of older adults had participated in a variety of leisure, social, and productive occupations across their lifetimes. These activities related to their overall successful aging and QOL.

HELPING BEHAVIORS AND HYPERTENSION: RECENT EVIDENCE FROM THE HEALTH AND RETIREMENT STUDY

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Hypertension is a risk factor for many serious diseases and is the leading risk factor world-wide for death. This condition is strongly associated with life style and health behaviors and may also be affected by individual's social interactions and connections. One form of social interactions examined in this study is as conceptualized as helping others, which is a common form of productive activity among older Americans. In this study, we evaluate whether informally helping other people in one's social network and volunteering one's time for formal organizations have a statistical relationship with high blood pressure among middle-aged and older persons. We analyze data from the 2006 Health and Retirement Study, including community-dwelling respondents only. Our bivariate results show a negative relationship between both types of helping behaviors and hypertension. In addition, after controlling demographic, social class, social support, and other health behavior risk factors, our binomial logistic regression results confirm a negative relationship between informal and formal helping behaviors and high blood pressure. That is, middle-aged and older persons in this nationally representative population-based sample who volunteer or help their neighbors, friends and non-co-resident relatives are less likely than persons who do not engage in this behavior to report high blood pressure. This study provides additional supporting evidence that helping others is beneficial for those who are helped as well as for the helper. Programs and policies that encourage these types of helping behavior may improve the overall health profile of the older population.

PERCEIVED AND ACTUAL CONNECTEDNESS BETWEEN ELDERLY PATIENTS AND THEIR PRIMARY CARE DOCTORS: TRUST WELL PLACED

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This paper explored perceptions of community dwelling elderly patients regarding connectedness with their doctors. These perceptions were considered in the context of physicians' and patients' evaluations of patient health and health habits. Interviews were conducted with 355 elderly patients (X age = 80) who participated in a panel study of successful aging. Most patients (86.8%) demonstrated a high level of trust in their primary care doctors. Patients also believed that their physicians are familiar with their values and preferences regarding health-care (87.5%), and with their health habits (82.6%). However, only 53.7% of the sample reported that their physician is well acquainted with their personal life. Data were also obtained from physicians of respondents, via telephone interviews (N= 187). The objective was to determine whether physician views of patient health and health habits corresponded with patients' self reports. Physicians evaluated most of their elderly patients as being in good health and free of cognitive impairment. There was a very high level of concordance between physician reports and patients' self evaluations. Physicians offered somewhat less positive health ratings relative to patients' self evaluations. The overall findings lend credence to patient perceptions that their physicians are familiar with their health needs, and suggest that elderly patients and their primary care physicians are well connected with one another.

PREDICTORS OF PHYSICAL ACTIVITY IN THE OLDEST OLD: IMPLICATIONS FOR HEALTHY AGING PROGRAMS

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Though improved cognitive, physical, and psychosocial health, functional capacity, overall quality of life, and successful aging has been associated with regular physical activity among older adults, there has been much less attention focused on the oldest old (individuals age 85 and older). This study's aim is to explore potential predictors of different types of physical activity among the oldest old. Data from the Learning from our Elders: The Longevity Project (N= 166; 62.7% female; mean age =94.27; SD = 4.74) were analyzed using a logistic regression to determine predictors of different physical activity levels, including levels of flexibility and strength training. A variety of key psychosocial variables emerged as significant predictors in the models. More specifically, significant predictors for participation in weekly low intensity activity versus moderate or vigorous activity were age, self-confidence, social activity participation, and emotional coping ($ps < .05$). Organizational religiosity, informational social support, and satisfaction levels with amount of support were significant predictors ($ps < .05$) of participation in activities to improve flexibility with self-confidence exhibiting a trend ($p = .06$). Finally, factors remaining in the model to predict participation in activities to improve muscle strength were gender, perceived control, and Valuation of Life ($ps < .05$) with health ratings remaining a trend ($p = .091$). Physical activity as a critical component of successful aging and creative healthy aging programs will require researchers and providers to consider key psychosocial factors to effectively address the different activity needs of the oldest old.

SOCIOECONOMIC POSITION AND SUBJECTIVE WELL-BEING AMONG ELDERLY PEOPLE IN SWEDEN

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INTRODUCTION: Relationships between socioeconomic position (SEP) and health have been studied extensively, between SEP and subjective well-being less, especially among elderly. We study the relation between four measures of SEP and four measure of well-being. METHOD and MATERIALS: A nationally representative random sample of Swedes aged 77-99 years were interviewed in 1992 (n=537) (dropout rate=4.6%). MEASURES OF WELL-BEING: Sense of coherence is based on three questions, one from each domains comprehensibility, manageability and meaningfulness, life satisfaction on three questions regarding fulfilled life expectations, social circumstances on three questions about positive relations to important persons and housing autonomy, and quality of life on questions regarding family relations, leisure and evaluations of life. MEASURES OF SOCIOECONOMIC POSITION (SEP) are income, cash margin (ability to raise 1,300 \$ in a week), social class based on main lifetime occupation, and highest finished education. RESULTS: Significant correlations were found between SEP and well-being measured as sense of coherence, social circumstances, and quality of life, but not to life satisfaction. Not all separate correlations were significant. Many more significant correlations were found among men than among women. Among men significant effects were found for all four measures of SEP, among women only between cash margin and well-being. Among men income and cash margin were the most important measures of SEP, followed by social class and with education as the least important. CONCLUSION: SEP is important for subjective well-being among elderly, economically oriented measures of SEP more so. SEP are more important for men than for women.

OFF TARGET SPEECH IN AUTOBIOGRAPHICAL NARRATIVES: WANDERING WORDS OR ELABORATIVE ADDITIONS?

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Sharing autobiographical stories occurs across the lifespan. The characteristics of shared stories can affect the dynamics of social interactions. In particular, older adults' stories have been found to contain higher levels of off-target speech than younger adults' stories; they contain more speech that is irrelevant or indirectly relevant to the topic. Off-target speech is assumed to degrade the quality of older adults' communication. The aim of the study was to challenge this assumption by asking "What is the specific content of indirectly relevant information provided during story sharing?" Older and younger adults (N = 129) recalled either autobiographical memory stories or standard fictional stories about two everyday topics. Audio-tapes of their open-ended narratives were transcribed (blinded for participant identifiers and speech fillers) and content coded for irrelevant and indirectly relevant information using standard procedures. As expected, older adults produced more off-target information. To assess the content of this "off target" speech, all indirectly relevant speech was reliably coded for three categories that in fact provide useful story asides: (i) world knowledge related to the event, (ii) autobiographical facts about the story characters and (iii) references to related events in the characters' life story. Findings show that older adults produced more autobiographical facts and life story information than younger participants when sharing autobiographical memories, but not when sharing fictional stories. Thus, inclusion of story asides, previously considered off-target speech that degrades older adults' communication, appears to be used strategically by older adults to elaborate their autobiographical narratives.

STRATEGIES AND ACTIVITIES FOR SUCCESSFUL LATER AGING

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Although health has improved and disability has lessened for the elderly overall, the challenges of later aging remain significant. The present study investigated self-reported strategies and activities for successful aging in later aging. Participants were 242 members of the Terman Study of the Gifted who responded to an open-ended question across three years asking them to report strategies and activities they find most important in making the most of their aging years. They were average ages of 84 and 86 at the two time points. Up to 5 responses were coded for each participant, with an average of 2 responses at each time. Responses were content coded into 15 categories, which consisted primarily of motivational strategies and activities. The study explored changes in responses over time, gender differences, and variations in responses according to age, perceived health, and life satisfaction. Results showed that motivational strategies emphasized emotion regulation and adaptation, openness and agreeableness, and striving for independence and perseverance under adversity. Activities responses emphasized social relationships, family involvement, productive, intellectual, and leisure activity, and health maintenance. Changes over the three-year time period were consistent with contemporary theories of successful aging, with increased emphasis on emotion regulation and adaptation. Gender differences were evident with higher productive and intellectual activity in men and greater social involvement in women. Perceived health was more strongly related to strategies and activities than age. Life satisfaction was related to life engagement. Results are discussed in terms of their implications for successful later aging.

EFFECT OF INTERNAL ADAPTATION AND EXTERNAL RESOURCES TO PSYCHOLOGICAL WELL-BEING FOR THE DISABLED ELDERLY

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Purpose: This study explored the effect of internal adaptation and external resources to psychological well-being for the disabled elderly. **Methods:** Data were collected by face-to-face interviews of physically disabled elderly, included the institutional and community-based long-term care service users in middle Taiwan. The survey was approved by IRB procedure. 563 persons interviewed and 505 of them completed the survey and met the disability criteria. Structural equation modeling was applied for analysis. Coping strategies and external resources were hypothesized to be related to adaptation difficulty to disability, and further carried their influence on the depressive symptoms and life satisfaction. Exogenous variables included demographics, physical and cognitive function, social support, and self management evaluation. **Results:** Acceptance-action coping strategy would reduce the difficulty of adaptation, but venting-avoidance and seeking-support coping strategies increased the difficulties. External resources reduced the effort of seeking-support coping, and also reduced the adaptation difficulty. People with more adaptation difficulties had more depressive symptoms and less life satisfaction, which means less chance to successful aging. **Discussion:** Engagement coping strategies and external resources are positive for the adaptation to disability, and therefore increase the opportunity of successful aging for the disabled elderly.

COPING WITH ADVERSITIES TO MAINTAIN AN EXERCISE PROGRAM AS A FUNCTION OF AGE

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To maintain a vigorous exercise program like running it is sometimes necessary to overcome disincentives such as physical adversities of varying severities. In accordance with the self-efficacy literature we hypothesized that individuals high in self-efficacy cope with such adversities more than those low in self-efficacy. We also maintain that commitment to an exercise program will over time, accrue psychological benefits similar to that of high self-efficacy due to mastery experiences. Thus, we predicted older runners, regardless of their level of self-efficacy, will cope with adversities on a level similar to younger, high self-efficacy runners. Results were derived from an internet survey of 565 runners ranging in age from 18 to 70. Congruent with the commitment position, younger runners high in self-efficacy reported a significantly greater adherence to running than those low in self-efficacy, whereas, all older runners reported adherence levels on par with the younger high self-efficacy runners. As predicted, high self-efficacy consistently aided younger runners to cope with physical adversities (e.g., aches, pains, illness) and poor running conditions (e.g., bad weather) significantly more than those low in self-efficacy. Self-efficacy did not appear to impact older runners as all older runners coped with adversities at a level equal to high self-efficacy younger runners. Our results imply that if individuals can be persuaded to maintain an exercise program long enough, in time they will develop necessary coping skills to overcome adversities that might weaken their commitment and thereby reap the benefits of continued vigorous exercise.

MEASURING EXISTENTIAL REGRET IN OLDER ADULTS: THE DEVELOPMENT AND VALIDATION OF THE MULTIDIMENSIONAL EXISTENTIAL REGRET INVENTORY (MERI)

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The role of existential regrets in the lives of older adults is extremely important to recognize. Existential regret is a state of despair, guilt, and anxiety experienced over missed opportunities and failures to actu-

alize personal and interpersonal potentials in life. Given the absence of a reliable and valid measure of the construct, this study reports on the development and psychometric properties of a 50-item Multidimensional Existential Regret Inventory (MERI), with data collected from 106 community residing elderly. Item analysis resulted in the retention of 46 items and an exploratory principal components factor analysis uncovered 5 factors (60% of variance): Inner Struggle, Limits on Experience, Neglecting Others, Self-Deprecation, and Undoing the Past. Secondary qualitative analyses of responses to an open-ended question, "Do you have any regrets in life?" clearly confirmed the content validity of each MERI dimension. Regarding psychometric properties, the MERI and MERI subscales demonstrated good internal consistency. In support of construct validity, the MERI correlated positively with existential guilt, existential vacuum, depression, and a compromised health status, and negatively with personal meaning, death acceptance, self-forgiveness, personal responsibility, secondary control, and life satisfaction. The MERI showed some overlap with a measure of socially desirable responding. No significant differences on the MERI and the MERI subscales were found for gender, age, marital status, and living arrangements. Overall, the MERI shows promise as a useful tool for examining the impact of existential regret on the well-being and successful aging of older adults.

CONCEPTUALIZING AND OPERATIONALIZING HEALTH IN LONGITUDINAL RESEARCH ON AGING

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"Usual", "Healthy", "Optimal", and "Successful" aging are multi-dimensional concepts that can include physical and cognitive functioning, engagement, activity, and social relating in addition to health. However, no clear consensus exists on the operationalization of these concepts, or even on the basic terminology. Very little has been done to review operationalizations of these concepts in existing research, nor has the degree to which these constructs overlap benefited from systematic treatment. Our work takes operationalizations of healthy aging tabulated in Depp & Jeste's 2006 review (Definitions and predictors of successful aging: A comprehensive review of larger quantitative studies) and considers them in the context of existing longitudinal studies of aging associated with the Integrative Analysis of Longitudinal Studies of Aging (IALSA) research network. We examine the potential to replicate various operationalizations in each IALSA study. We also present graphic representations of a measurement model that treats these terms as nested, and facilitates consideration of how "healthy" aging concepts might apply at the individual and population levels.

EFFECTIVENESS OF NINTENDO BRAIN AGE IN PREVENTING COGNITIVE DECLINE IN MIDDLE-AGED AND OLDER ADULTS

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Effective cognitive interventions are those that delay decline or result in improvement, are convenient for participants to use, and adjust with increasing novelty and demand (Willis et al.). Several companies are now offering computerized tasks designed to provide the daily mental stimulation thought to slow cognitive decline, such as the Nintendo Brain Age programs. Preliminary work (Patrick et al.) suggests that these tasks offer an ecologically-valid approach to assessing cognitive performance. Although these programs may present fewer participant demands than lab-based intervention protocols, their effectiveness remains untested. The goal of the current study was to assess whether or not participants of the Nintendo Brain Age 1 and Brain Age 2 videogames would show cognitive improvement on a variety of psychometric tasks, such as Digits Backward, Trail-Making task, Raven's Matrices, and Digit-Symbol Coding tasks. Pilot study data were collected for five middle-aged adults

(M age = 54.0 yr, SD = 2.6), who completed baseline psychometric tests, played Brain Age 2 tasks daily for 14 days, and then completed post-test psychometrics. Results indicated a decrease in total Brain Age scores between pre- and post-test [$t(4) = 5.78, p < .01$], as well as a trend toward increased Digit Symbol Coding scores, working memory task scores, and decreased latencies for the TMT and Raven's Matrices tasks. Ongoing field work continues to address the effectiveness of handheld videogames as a cognitive intervention for middle-aged and older adults.

CORRELATES OF HEALTHY AGING AMONG OLDER ADULTS WITHOUT A HIGH SCHOOL DIPLOMA

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Education is associated with health, with those with lower levels of education typically experiencing worse health outcomes than those with higher levels. Despite their elevated risk of poor health, some individuals with little formal education experience good health in older adulthood. To characterize those who maintain their health in the face of many presumed obstacles, we examined demographic and behavioral correlates of healthy aging among 2,782 older adults without a high school diploma (weighted characteristics: 57% female, 71% White, 47% married, median age = 76) who participated in the 2004 wave of the Health and Retirement Study. Healthy aging was defined as absence of major disease, disability, cognitive impairment, and depression. Correlates included age, years of education, gender, marital status, race, wealth, BMI, physical activity, and smoking and drinking status. Using logistic regression, healthy aging was regressed on each potential correlate individually and then simultaneously. Approximately 18% of participants experienced healthy aging. In adjusted models, the odds of healthy aging decreased with advancing age ($OR=0.95, p < .0001$) and were lower for those with less wealth ($OR=0.43, p < .0001$ for lowest vs. highest quartile). The odds increased with greater years of education ($OR=1.09, p < .0001$). Contrary to expectations, adjusted odds of healthy aging were higher among Blacks ($OR=1.51, p < .01$) and Hispanics ($OR=1.76, p < .05$) than Whites. Obesity, physical inactivity, and smoking were associated with reduced odds. An understanding of factors associated with healthy aging among those at high risk of negative health outcomes can inform efforts to reduce health disparities.

EFFECTS OF NEIGHBORHOOD SES ON FUNCTIONAL ABILITIES: TESTING THE ENVIRONMENTAL DOCILITY HYPOTHESIS

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The effects of neighborhood characteristics on health, above and beyond individual characteristics, have long been debated. Yet, this line of research largely has lacked theoretical grounding. Lawton's environmental docility hypothesis, which posits that environments should have their greatest effects on persons in moderate health, is tested. Data derive from 5,688 community-dwelling people aged 50 to 74 living in New Jersey recruited to participate in the ORANJ BOWL panel using random digit dial sampling procedures. The effects of neighborhood SES (normalized index of disadvantage) on the functional abilities of older persons with three levels of chronic conditions were examined. Group 1 included people who reported 0, 1, or 2 chronic medical conditions, Group 2 reported between 3 and 5 chronic conditions, and Group 3 reported 6 or more conditions. Predictors included individual education, household income, and neighborhood SES. Results of linear regression analyses were supportive of the environmental docility hypothesis. For both Group 1 ($Beta = .01$) and Group 3 ($Beta = -.04$), neighborhood SES did not have an independent effect on level of func-

tional abilities, while for Group 2, the effect of neighborhood SES was significant at the .001 level ($Beta = -0.11$). Implications of these results for theory and policy are discussed.

THE EFFECT OF DAILY SLEEP FACTORS ON VITALITY: DOES GLOBAL SLEEP QUALITY MATTER?

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Poor sleep is related to a decrease in psychological well-being, which can be represented by the subjective feeling of vitality, or the feeling of being alive and alert. In order to better understand this relationship in older adults, 296 subjects, aged 59 to 75, from the Notre Dame Study of Health and Well-Being completed the Pittsburgh Quality of Sleep Index to measure global quality of sleep and 56 consecutive days of daily quality of sleep items (i.e., waking rested, having trouble sleeping, and waking with pain). This study examined how daily quality of sleep affected daily vitality, and the function of global quality of sleep on this relationship. Although waking feeling rested increased daily vitality, and having trouble sleeping decreased vitality, these relationships were not moderated by global sleep quality. The relationship between daily vitality and daily pain, however, was moderated by global quality of sleep, such that when greater waking pain was reported, the daily level of vitality decreased. In addition, those who reported better global sleep quality also reported higher levels of vitality on a day when waking with less pain. Thus, those reporting the best global sleep quality, showed the steepest decline in daily vitality when waking with increased pain. The identification of these relationships is an important step in better understanding mechanisms that influence the relationship between sleep and well-being outcomes in older adults.

HEALTH AND SOCIAL SUPPORT AMONG CENTENARIANS

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Previous studies have demonstrated that health and social support are important predictors of longevity. The purpose of this study was to examine the effect of social support on health among centenarians. The sample consisted of 138 Midwestern centenarians. About twenty-five percent of the centenarians were living independently, and seventy-five percent of centenarians were living in a care facility. For measurements of health, data on BMI, subjective health questions, and the Mini-Nutritional Assessment were used. To measure social support, the Social Provisions Scale was used with the focus on the subdimensions "guidance" and "reliability." Results indicate that, after controlling for BMI, participants with higher self-rated health were less likely to need assistance eating, $r = .30$, $p < .01$. Furthermore, when asked subjective health comparison questions, centenarians rated their health higher when comparing themselves with others, $r = .24$, $p < .05$. Centenarians who reported weight loss in the last three months also reported having nutritional problems, $r = -.24$, $p < .05$. Living independently was correlated with not needing assistance to eat, $r = .25$, $p < .05$. Centenarians who rated their health better also were more likely to live independently, $r = .26$, $p < .05$, reported no nutritional problems, $r = .22$, $p < .05$, reported there were more people in their lives they could rely on, $r = .23$, $p < .05$ and reported that they received more guidance from others, $r = .25$, $p < .05$. The main finding of the study shows centenarians with higher ratings of social support measures also had higher ratings on comparative subjective health questions, suggesting a positive association between health and social support.

SESSION 665 (SYMPOSIUM)

UNDERSTANDING THE MEANINGS OF STIGMA IN SENIOR LIVING COMMUNITIES

Chair: J.K. Eckert, *Center for Aging Studies, University of Maryland, Baltimore County, Baltimore, Maryland*

Discussant: P. Carder, *Portland State University, Portland, Oregon*

Stigma and the Cultural Context of Residential Settings for the Elderly is a large-scale, ethnographic study examining the experience and social construction of stigma in seven residential senior housing settings in the Eastern Mid-Atlantic region of the United States. Relocation to the variety of specialized, seniors-only housing settings often occurs in connection with stigmatizing circumstances and may simultaneously make stigma more pronounced as residents struggle to control or manage potentially stigmatizing conditions, especially those that might be perceived negatively by others and/or require relocation to a higher level of services. A large Active Adult Community (AAC) and a multi-residential senior housing site comprised of independent apartments, an assisted living community, and a nursing home will be the focus of the symposium. The AAC has approximately 1650 units consisting of single family homes, condominiums, and townhomes located on riverfront property with recreational, cultural, and social activities available through the community association. A community-supported health organization offers a range of services to members. The religiously-affiliated multi-residential site has over 450 units, including nearly 200 independent living apartments, 60 assisted living units, and a 162-bed skilled nursing and rehabilitation center. Residents within the independent living apartments have access to a range of community-based congregate care services, while assisted living and nursing home residents utilize on-campus resources, such as a nurse practitioner and board-certified internist/geriatrician. This symposium will present the analytic strategy employed, as well as research challenges and opportunities in identifying the varied dimensions of stigma in these very different settings.

"WE KNOW WHAT IT MEANS TO SERVE": VOLUNTEERISM AMONG OLDER ADULTS IN SENIOR RESIDENCES

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Valued as a way to remain active and contribute to society, volunteerism is associated with many positive physical, cognitive, and psychosocial outcomes. This paper explores the volunteer experiences of older adults and their effect on self-identity and relationships. Drawing from in-depth interviews with residents, staff/administrators, and families in three settings, findings indicate that: 1) individuals are concerned about being perceived as unproductive if they do not volunteer; 2) economic considerations relate to volunteer involvement; 3) volunteers are widely admired, but the efforts of particular individuals are at times denigrated; and 4) complex dynamics influence how resources are allocated among volunteer groups, who receives recognition, and who rises to leadership. The politics of volunteerism affect individuals differently, sometimes leading to stress and causing some to relinquish their role while others flourish. Conclusions address what can be done to reduce stigma so that volunteerism leads to meaningful experiences in senior residences.

THE MANY FACES OF STIGMA: THE CASE OF FRED ASTAIRE

A. Frankowski, M.C. Nemec, A.D. Peebles, *UMBC, Baltimore, Maryland*

Stigma is often perceived as dichotomous: individuals actively stigmatize or are stigmatized by others. Our data indicate that the acts of stigmatizing residents in long-term care are more complex, demonstrating that both actions can and do function simultaneously. The focus of this paper is on one case study, Mr. Fred, an independent senior hous-

ing resident (a) who is stigmatized by several residents in his apartment house, (b) who is protected by staff from potential and actual acts of stigmatization by other residents, and (3) who himself discredits neighbors in some of his interaction within his building. This paper highlights the complex ways in which stigma operates in the field, frames this case study in light of the ethnographic data collected to date, further refines the theoretical construct of stigma, and offers implications for future research.

ANALYZING STIGMA: METHODOLOGICAL DEVELOPMENTS AND CHALLENGES

B. Harris-Wallace, J.K. Eckert, S. Goldman, M.C. Nemec, R. Hrybyk, *University of Maryland, Baltimore County, Baltimore, Maryland*

Stigma and the Cultural Context of Residential Settings for the Elderly is a large-scale qualitative study using in-depth ethnographic techniques (e.g., informal and formal interviewing; participant observation, reflected in detailed fieldnotes; document review; and team-centered debriefing sessions) in gathering information to better understand how stigma is defined within the socio-cultural environment of senior housing. The sites studied, which are very different in organizational structure and populations served, represent a variety of multi-level housing settings combining independent living, assisted living, and nursing homes. An interdisciplinary team of researchers developed interview guides for residents, family, and staff; regularly debriefed with the fieldwork team; discussed, and collaboratively-coded emergent concepts and themes from the interviews. This paper will present the analytic strategies employed and unique methodological challenges and opportunities presented by this ambitious large-scale study.

THE STIGMA OF INACTIVITY IN AN ACTIVE ADULT COMMUNITY: "AGE IS REALLY IRRELEVANT"

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This presentation explores the role physical/cognitive functioning plays in perceived "successful aging" within an active adult community. Our findings indicate how inactivity and social disengagement, not age, are the key stigmatizing factors. Drawing upon interviews with over 30 residents from a long-established active adult setting, we learn how old age is valorized when accompanied with relative good health and sound mind. Admired are those who have triumphed over illness or those who remain active at advanced ages. With well over 50 resident-initiated interest groups, there is a widespread expectation of resident involvement. However, as residents age, their ability to participate in many cases becomes limited. One's own potential disability, cognitive impairment or limitations, are at times feared and met with denial, often leading to a lack of planning for the future; it may also be one reason for the lack of support for the community-supported health services.

STIGMA, FEAR AND HIDING DECLINE IN A SENIOR HOUSING COMMUNITY

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Residents in senior housing, content with their current living environment, are fearful of transitioning to a nursing home. For this paper, we conducted a narrative analysis of ethnographic fieldnotes and interviews with residents, their families, and staff, compiled over a two-year period at one multi-residential senior community. We examine the relationship of stigma, fear, and hiding decline; discuss how it is manifested in everyday experience; and explore its relevance to residents transitioning to other levels of care. Our findings demonstrate that fear and stigma precipitate residents to elicit assistance from neighbors, family, friends, and staff to disguise their decline to prevent a move. Furthermore, the desire to age-in-place and the stigma associated with phys-

ical and/or cognitive decline motivate residents to hide health-related conditions or incidents (i.e., a fall or forgetting to take medication). Implications regarding practices to minimize resident fears about decline will be discussed.

SESSION 670 (PAPER)

USING TECHNOLOGY TOWARD HEALTHY AGING

VIRTUAL VOLUNTEERING, CIVIC ENGAGEMENT AND OLDER ADULTS: A SOCIAL CAPITAL PERSPECTIVE

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Virtual volunteering is one such phenomenon that refers to performing the act of volunteering from an offsite or remote location through the use of Internet communication technologies. The online nature of volunteering also paved the way for sections of population, whose physical mobility is restricted either by disability or old age, to participate in volunteering. Older adults have the time, knowledge and skills to contribute to many social causes across the world if not restricted by age related mobility issues. There are 75 million baby boomers going to retire in the next two decades and many of them are familiar with the Internet. The recent Pew Internet research (2006) also shows that Internet penetration is growing among older adults. This study offers a conceptualization and preliminary measurement strategy to enhance knowledge on the institutional capacity of virtual volunteer programs to engage older adults. Data were collected from 15 organizations that employ older adults for virtual volunteering (N=121) asking questions related to motivation and sustainability of virtual volunteering by older adults (age range 63-75). A mix method model has been used to collect indepth qualitative interviews with 7 program directors and an online focus group between 12 virtual volunteers to assess the extent of institutional capacity and volunteer motivation and civic engagement on this new kind of volunteering. The paper concludes with discussion on how this could enhance volunteering among baby-boomer retirees and the future possibilities that it could offer to enhance social capital among participating older adults.

PROMOTING OLDER ADULTS' E-HEALTH LITERACY: AN INNOVATIVE PUBLIC LIBRARY PROGRAM

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Improving older adults' e-health literacy, or the ability to obtain, process, and use electronic health information, requires innovative interventions that effectively integrate the different resources and expertise of organizations at all levels. We first report the background, development, successes, and challenges of such an intervention, which represents a novel and fruitful collaboration among local public libraries and senior centers, a Library and Information Science academic program at a state university, and the National Library of Medicine and National Institute on Aging of the National Institutes of Health. Next, we report key findings of Phase One (September 2007-July 2008) and Phase Two (September 2008-May 2009) of this intervention. During Phase One, 131 older adults aged 54-89 (Mean=68.9, SD=8.0) participated in the 4-week long training and completed the questionnaires. Key findings include: a) participants had overwhelmingly positive perceptions of the training program; b) after learning about the NIH SeniorHealth and MedlinePlus websites from the training, many participants started using these online resources to find high quality health information and even to guide their health decision making; and c) computer anxiety significantly decreased ($p < .001$) while computer interest and efficacy significantly increased ($p = .001$ and $p < .001$, respectively) from pre- to post-training, suggesting statistically significant improvements in computer attitudes between pre- and post-training.

During Phase Two, objective measures were added to assess participants' improvements in e-health literacy skills and knowledge. Finally, we discuss the implications for organizations interested in developing innovative interventions to improve the e-health literacy of the older population.

END-USER PERSPECTIVES ON PRIVACY AND OTHER TRADE-OFFS IN ACCEPTANCE OF QUALITY OF LIFE TECHNOLOGY

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Technology aimed at enhancing function and enabling independent living among older and disabled adults is a growing field of research. Privacy concerns are a potential barrier to adoption of such technology. Other potential barriers include reduced efficiency of QoLT relative to a human attendant, training and maintenance requirements, and reduced opportunities for social interaction. This paper reports data on these issues from two surveys of potential end-users: 1) a national web survey of disabled and non-disabled older adults (65+) and baby boomers (45-64); and 2) a mail survey of gerontology, stroke, and wheelchair user research registry members. The national web survey showed that potential users were least accepting of sharing or recording information about toileting behavior; sharing information with the government and insurance companies; and recording the information using video (versus sensors). Respondents who reported current disability were significantly more accepting of sharing and recording of information than non-disabled adults. Preliminary results from the registry survey also showed reduced acceptance for video monitoring, as well as technology that: 1) takes twice as long to perform tasks as a human attendant; 2) requires 5-10 hours to learn how to use; and 3) requires about one hour of maintenance per day. Potential end users were least accepting of technology that reduced their opportunities for social interaction. These data provide initial evidence for implicit trade-offs involved in the adoption of quality of life technology, and have important implications for the design of QoLT applications.

A NEW TOOL TO MEASURE LIGHT EXPOSURE, ACTIVITY, AND CIRCADIAN DISRUPTION IN OLDER ADULTS

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Aims: Sleep disturbances in older adults may be a result of lack of entrainment to the 24-hr day-night cycle due to low circadian light stimulus experienced by older adults. Light treatment, however, will not be embraced by clinicians until the relationship between sleep disturbances, circadian disruption and light exposures is established in the field. Several measurement problems exist for obtaining human circadian light-exposure data relevant to understanding how light therapy can improve sleep disturbances in older adults. Currently, activity and light data are collected using an uncalibrated wrist actigraph. **Methods:** Presented here is an overview of the recently developed Daysimeter, a personal device for recording activity and circadian light-exposure patterns. The Daysimeter is a head-worn device that places a photopic and a blue sensor near the plane of the person's cornea. Post-processing analyses using the model of human circadian phototransduction developed is used to estimate circadian stimulus (CS). **Data analyses:** Phasor analysis was used to quantify circadian entrainment and disruption using the circadian light-dark and rest-activity data from the Daysimeter. Correlations between rest-activity patterns obtained with the Daysimeter and the wrist actigraph were performed. **Results:** The correlation between activity data obtained with the wrist actigraph and the Daysimeter were high. **Conclusions:** The Daysimeter is a tool that can be used to increase efficacy of light treatment for sleep disorders in older adults. Data using the Daysimeter in older adults are needed to further the understanding

of how light and circadian entrainment can reduce sleep disturbances in older adults.

HEALTHY AGING: OLDER WOMEN'S CLOTHING NEEDS AND THEIR ATTITUDE TOWARD 3D BODY SCANNING TECHNOLOGY

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Because the older segment of the population is increasing proportionately at a greater rate than other segments of the population, attention to their clothing needs and preferences makes sense from a market and human issues perspective. Older consumers complain about the difficulty of finding well-fitting, comfortable clothing in stores, especially in the areas of the shoulders, back, waist, bust, arms and abdomen. Good fit of clothing is vital to an individual's psychological and social well-being; yet finding well-fitting clothing can still be challenging for older women. Previously traditional tape measures were used to assess apparel fit, but now the 3D body scanner has the ability to obtain 3D data from the surface of the human body, providing valuable information to improve garment fit. Body scanning technology is beginning to have many significant uses in the apparel industry that will benefit consumers, such as developing custom-made designs, selecting the best-fitting brand and size of ready-to-wear clothing, and providing virtual try-on of garments sold over the Internet. This research explores older women's clothing needs and their attitude toward 3D body scanning by developing a film of the 3D body scanning process as a consumer information source used for collecting survey and focus group data. This research provides preliminary data that would support future study of emerging technology applications on older consumers' customized clothing shopping opportunities. In addition, potential application of 3D body scanning technology in health prevention, posture modification, and body image for older adult's healthy aging will be discussed.

SESSION 675 (PAPER)

VALUE ADDED?: THE IMPACT OF SOCIAL NETWORKS ON HEALTH

GENDER DIFFERENCES IN RELATIONSHIP QUALITY, SELF-RATED HEALTH, PHYSICAL HEALTH AND DEPRESSIVE SYMPTOMS

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The current research examines gender differences in perceived emotional relationship quality (PERQ), self-rated health, physical health, and depression. A paper and pencil survey of 720 residents of 4 Continuing Care Retirement Communities was utilized to better understand the interplay of the study variables in the a growing housing choice among older adults. Structural Equation Modeling using random subsample cross validation was used to examine gender differences in this study. Results indicated six domains of PERQ and gender differences between the thoughtless and unwanted advice and informational emotional domains of PERQ and between self-rated health and the rejection domain of PERQ. Gender differences may be due to differing relationship expectations between men and women and their primary sources of support. These findings may help practitioners better understand the different expectations between men and women and their sources of social support. Women and men showed similar and significant associations between self-rated health, physical health, and depression.

A DAY IN THE LIFE: INVESTIGATING OLDER ADULTS' DAILY ACTIVITIES

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Although research on older adults' lives is increasing, much focus is on issues of pathology or loss. Less is known about the daily lives of healthy older adults. The primary objective of this qualitative research is to identify older adults' daily activities and social interaction. Adults age 65 and older (N=73; mean age =76; range 65-89) who resided in the community or a retirement living setting wrote about their planned activities for that day for 15 minutes. Using a grounded theory approach, 3 judges coded the essays for daily activities including interpersonal interactions and health promotion activities. Intraclass correlation for coders = .84; all t-tests for differences between coders NS. The most common activity mentioned were activities of daily living (ADLs) such as bathing, dressing, and eating. ADLs were discussed frequently by each participant (totaling 262 mentions for 73 participants). ADLs negatively correlated with walking ($r=-.26$) and doctor visits ($r=-.33$) and positively with depressive symptoms ($r=.33$). Only 6 participants (8%) mentioned working and 74% mentioned an interpersonal interaction. Overall, there were no significant differences in amount of activities reported between women and men but women reported more interactions with family and service providers, reading, praying, attending exercise groups, and napping. Men reported more yardwork activities. The results indicate that a focus on ADLs when describing one's daily activities may be associated with poorer health status.

INTENTION TO SCREEN AND ENCOURAGEMENT FROM SOCIAL NETWORK MEMBERS: A CROSS-GENERATIONAL PERSPECTIVE

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The interdependence model of social influence and interpersonal communication posits that social interactions partly impact individuals' health behaviors. Studies have documented that screening behaviors and intentions are enhanced through encouragement from healthcare professionals. This study evaluates associations between intentions to screen and the presence of social network members (family and friends) who encourage screening (blood cholesterol, blood pressure, blood sugar). The distinct roles of encouragers from different generations (older, same, and younger) were evaluated. Mexican origin adults (497 individuals from 162 families between 18 and 70 years of age) living in Houston, TX completed surveys regarding family health history, health related behaviors and cognitions, and their social networks. Results of hierarchical regression models show that having at least one same-generation network member who encourages participants to get blood cholesterol screening was associated with a higher intention to screen in the following year ($p \geq .001$), controlling for covariates (e.g., health beliefs, demographic characteristics). This association was stronger among participants in younger age groups (age < 55). For the blood pressure (BP) and blood sugar (BS) screenings, having same-generation (BP: $p=0.005$; BS: $p=0.045$) and older-generation (BP: $p=0.009$; BS: $p=0.008$) network members who encourage these screenings was associated with higher intentions to screen, whereas the presence of younger-generation encourager was not significantly associated. These findings suggest that intergenerational interventions utilizing social influence may be an effective strategy to increase screening behaviors for markers of metabolic syndrome among Mexican origin adults. Older-generation individuals may play an important role in motivating the screening behaviors of their network members.

"IT'S YOUR BADGE OF INCLUSION": AN EXAMINATION OF WOMEN'S SELF-ENHANCEMENT THROUGH INVOLVEMENT IN THE RED HAT SOCIETY

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One of our cultural mantras regarding aging is the importance of staying active and socially engaged. Although many studies report that people who are more socially integrated — for example, who participate in clubs and other organizations or spend time volunteering — enjoy better health and quality of life, we know little about the mechanisms through which such involvement enhances well-being in later life. Our study addresses this limitation using 56 semi-structured interviews with members of the Red Hat Society — an organization aiming to foster a supportive social network for middle-aged and older women and define aging more positively. Our analyses revealed five processes through which involvement in the group improved the women's self-conceptions and quality of life: (1) countering the invisibility of older women, which improved self-images, in part, by fostering a perception of women's agency in shaping others' views of them; (2) providing frames of reference for their own aging, which involved normalizing their experiences as well as making social comparisons that are either self-enhancing or inspirational; (3) sharing a belief in positive reflected appraisals of the group, which improves self-images of members; (4) promoting the maintenance of youthful identities that are self- and health-enhancing in our culture; and (5) expanding social networks at a stage of life when friendship ties are not only more important to well-being but also more difficult to create and maintain. We discuss the implications of our study for other organizations to which many older adults belong, many of which are — like the Red Hat Society — age and gender-segregated.

SOCIAL ENGAGEMENT AND HEALTH BEHAVIORS AMONG OLDER ADULTS IN THE HEALTH AND RETIREMENT STUDY

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Healthy behavioral habits are central to maintaining optimal health, and may be particularly important at older ages when health begins to decline for most adults. Prior studies have shown protective effects of social interactions and relationships on physical and mental health. However, we still have a limited understanding of how social interactions come to affect health among older adults. Using data from the 2006 Health and Retirement Study, I examined the role of social engagement on health behaviors among adults age 52 and older. Measures of social participation, social integration, and loneliness were used as indicators of social engagement. Linear regression models (logistic for outcome of smoking), estimated separately for women (N = 4146) and men (N=3035) and controlling for age, race/ethnicity, marital status, education, income, and employment status, were estimated for each of four health behaviors, body mass index (BMI), physical activity, sleep quality, and current smoking status. I found that women reporting higher social participation and integration were more physically active, had better sleep, and were less likely to smoke. In addition, loneliness was associated with higher BMI, less physical activity, and worse sleep among women. I also found that men with higher social participation and integration were more active and less likely to smoke, and men with higher participation also had better sleep. Among men, loneliness was associated with higher BMI, less physical activity, worse sleep, and higher odds of smoking. These results highlight the importance of social engagement for healthy behavioral habits in older adults.

SESSION 680 (SYMPOSIUM)

DEVELOPING A VISION-BASED IN-HOME MONITORING SYSTEM FOR OLDER ADULTS: OVERVIEW AND CHALLENGES

Chair: D. Parker Oliver, *Family and Community Medicine, University of Missouri, Columbia, Missouri*

This symposium will discuss the development of an in-home monitoring system for older adults using vision sensing. Methods to address privacy concerns regarding the use of cameras will also be highlighted. Three papers will be presented, including a hierarchical system for capturing and recognizing falls in the home environment, a calibrated, two-camera system in which a three-dimensional reconstruction is used to extract gait parameters, and a study investigating privacy concerns of older adults using this technology.

OLDER ADULTS' PRIVACY CONSIDERATIONS FOR VISION BASED RECOGNITION METHODS

G. Demiris¹, D. Parker Oliver², M. Skubic², M.J. Rantz², *1. University of Washington, Seattle, Washington, 2. University of Missouri, Columbia, Missouri*

This study aims to explore older adults' privacy considerations for vision-based monitoring systems. Alternative vision-based tools using silhouettes are investigated to address older adults' privacy concerns and willingness to allow such an application to be installed in their residence. Ten residents of an independent retirement community were recruited to participate in a series of normal activity scenarios. These sessions were video-recorded using different image processing and extraction approaches. Follow-up in-depth interviews with participants were conducted after a demonstration of the captured images. Findings indicate that image distortion can alleviate privacy concerns associated with the use of cameras. Participants expressed no privacy concerns with silhouette images and emphasized the importance of anonymity in the video sequences. They furthermore expressed the desire to control system operation by being able to turn a vision-based system off and on, and also determine who has access to the collected information.

VISION-BASED FALL RECOGNITION FOR ELDERS

M. Skubic¹, D. Anderson¹, J.M. Keller¹, M.J. Rantz², M. Aud², *1. Electrical and Computer Engineering Dept., University of Missouri, Columbia, Missouri, 2. Sinclair School of Nursing, University of Missouri, Columbia, Missouri*

Vision sensors represent a rich source of information that can be used to passively monitor activity and falls of elders and do not require the use of wearable sensing devices. In this talk, we describe a hierarchical system for capturing and recognizing elderly falls in the home environment using vision sensing. Privacy of the residents is preserved by not using the raw video, but instead, extracting binary silhouette maps, which represent the pixels a person occupies in an image. Silhouettes acquired from two cameras are used to build a three-dimensional object in voxel space. Linguistic summarizations are built from a sequence of three possible states: upright, on the ground, and in between. These linguistic summarizations are then used for the recognition of falls. One advantage of the hierarchical approach is that the lower level state signals provide a trace of what activity led up to the fall.

AUTOMATIC GAIT ANALYSIS USING VISION-BASED MONITORING

F. Wang, M. Skubic, E. Stone, J. Krampe, W. Dai, T. Banerjee, *University of Missouri, Columbia, Missouri*

In this paper, we will present a method of automatically computing gait parameters including walking speed, step time and step length from a calibrated three-dimensional reconstruction built from multiple cameras. These parameters are validated with an electronic GAITRite walk-

way and a three-dimensional Vicon motion capture system. Using the GAITRite and Vicon systems for validation, excellent agreement is found for walking speed, step time, and step length. The method is then applied and tested in TigerPlace with elderly residents who participated in a study designed to represent normal in-home activities. The technology provides a reliable and quantifiable method of monitoring the gait parameters in a daily normal environment.

SESSION 685 (POSTER)

DISPARITIES AND MINORITY AGING

CULTURAL AND SOCIAL INFLUENCES ON THE DECISION TO HAVE A TOTAL KNEE REPLACEMENT

T. Harrison, *The University of Texas at Austin, Austin, Texas*

Despite evidence suggesting that total joint replacement alleviates symptoms of osteoarthritis fewer women than men and fewer minorities than Non-Hispanic whites elect to have the procedure. The purpose of this in-depth case study was to analyze reasons for not undergoing total joint replacement despite pain, stiffness and limited movement. The participant was one of 24 Mexican American women currently participating in an on-going mixed-method culturally comparative ethnographic study exploring disablement outcomes. Multiple life history interviews, participant observations, surveys, and a life history calendar were used to understand how disablement influenced the life of this 75-year-old Mexican woman with mobility impairment. Life history themes explaining her decision to forego a total knee replacement included: Traditions of Family Healing; Memories of Medical Errors; Life after Past Surgeries; and Living with Bad Knees. This life history demonstrates how larger cultural and social factors influence the individual's medical decision to forego a potentially enabling procedure. This study was supported by a grant from NIH/NINR, R01NR010360.

IS THERE AN ETHNIC DISPARITY IN MORTALITY BETWEEN OLDER MEXICAN AMERICANS AND EUROPEAN AMERICANS?

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Background: Frailty and diabetes are more prevalent in older Mexican Americans (MAs) than in European Americans (EAs) and are major contributors to mortality. This study examined whether this ethnic difference in risk factors for mortality predicts correspondingly lower survival in MAs. Methods: Subjects were 749 MAs and EAs in the San Antonio Longitudinal Study of Aging, aged 65-74 at baseline, followed an average of 9.9 years. Frailty and diabetes were classified using established criteria. Unadjusted ethnic differences in mortality at the end of follow-up were tested using chi-square. A Cox proportional hazards model estimated the ethnic (MA vs. EA) hazard ratio (HR) for mortality, adjusting for frailty, diabetes, cardiovascular comorbidity, and sociodemographic factors. Baseline ethnic differences in covariates included in the model were tested with chi-square or t-tests, as appropriate. Results: MAs compared with EAs had higher baseline prevalence of frailty (11.3% vs. 7%, $p < 0.05$) and diabetes (33.5% vs. 11.9%, $p < 0.001$). Before adjustment, more MAs than EAs were dead at follow-up (32.7% vs. 25.9%, $p < 0.04$). The adjusted ethnic HR for mortality, however, was non-significant (1.02, 95%CI:0.7-1.49). Nonetheless, both frailty (HR=1.8, 95%CI:1.2-2.71) and diabetes (HR=1.64, 95%CI:1.2-2.71) contributed significantly to increased mortality. Conclusion: In spite of the higher prevalence of known risk factors for mortality among MAs, there was no significant ethnic difference in survival over a 9.9 year follow-up period using a multivariate model. Understanding the underlying reasons for this unexpected finding may provide important insights toward development of creative strategies for promoting healthy aging in both MAs and EAs.

ADAPTING A FAITH-BASED, HEALTHY EATING PROGRAM FOR OLDER AFRICAN AMERICAN CANCER SURVIVORS

K.S. Clay, A. Dimatteo, *School of Social Work, University of Georgia, Athens, Georgia*

Body & Soul is an innovative faith-based dietary and lifestyle intervention for African Americans designed to build on the strengths of African American culture and the Black church as a way to promote increased fruit and vegetable consumption and overall healthy living. Body & Soul has demonstrated that a faith-based health promotion intervention that uses church-wide nutrition activities, self-help educational materials, and motivational interviewing can significantly increase fruit and vegetable intake and decrease fat consumption. Although African American cancer survivors could benefit from access to the Body & Soul intervention, no other study has tested the feasibility of applying this model to cancer survivors. In this presentation, the presenters describe the adaptation of Body & Soul for older African American cancer survivors. First, the development of the original intervention will be described. Next, information about early field research and the steps taken to adapt the intervention to the unique needs of older African American cancer survivors will be explained. Finally, it will be argued that Body & Soul is a highly beneficial and cost-effective approach to nutrition education in older African American cancer survivors. The complete pilot study outcomes will be presented separately.

MEDICARE PART D ENROLLMENT AWARENESS AMONG LOW INCOME AFRICAN-AMERICAN BENEFICIARIES

Y.G. Hipps, R. Socci, *Morehouse School of Medicine, Atlanta, Georgia*

Objective: In 2007, the U. S. Department of Health and Human Services estimated that about 4 million Medicare beneficiaries did not have creditable drug coverage. This study examined the Medicare Part D enrollment awareness and practices of low income African-American beneficiaries aged 65+. Settings: Volunteers were enrolled from community-based senior centers and residences in Fulton and DeKalb Counties, GA focusing on selected zip codes with varying proportions of low income African American Medicare beneficiaries aged 65+. Subjects: Of the 600 individuals outreached, 416 successfully completed the study. Outcome measures: Study participants completed four surveys: Medicare Part D Enrollment Awareness Survey; Short Form-36 (SF-36); and Socioeconomic Survey. A Medicare Part D Enrollment Practices Survey was administered randomly to a representative sample of the study population (n=100). Results: In both the 75+ and 65-74 age groups, despite gaps in enrollment knowledge and awareness, the participants were able to enroll in a Medicare plan with prescription drug coverage. For the 75+ age group, these gaps were associated with increasing age and a lower level of education ($p<0.05$); while for the 65-74 age group, the association was with lower yearly income. For both age groups, the PCS and MCS values from the SF-36 survey were significantly lower than those age groups in the general population. Significant socioeconomic differences were detected between volunteers from Fulton and DeKalb counties. Conclusions: There was a higher degree of health care disparities among the study population than among the general population as well as some comprehension and/or literacy challenges.

SELF-CARE PRODUCTION EXPERIENCES IN ELDER AFRICAN AMERICANS WITH HYPERTENSION AND COGNITIVE DIFFICULTY

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Cognitive decline in elders is associated with difficulties carrying out self-care activities requisite to controlling blood pressure. More

knowledge is needed about elders' experiences in producing hypertension-related self-care. The investigators used Orem's Theory of Self-Care to explore the successful production of hypertension self-care in individuals demonstrating some cognitive dysfunction. A sample of 10 urban elder African Americans was recruited from a larger study. Individuals who had >1 SD from normative means on at least one of seven selected subtests of the Fuld Object Memory Evaluation (FOME) and the MacNeill Lichtenberg Decision Tree (MLDT) tests measuring memory, temporal orientation, or semantic fluency, yet successfully performed dietary or physical activity self-care and/or had controlled BP were eligible to participate. Data were obtained by semi-structured interviews and analyzed by identifying codes and themes. Elders were found to experience difficulties with producing self-care which were characterized by three themes: preparation, monitoring, and evaluation. Self-care production involving overcoming personal and environmental factors were found to be cognitively demanding. Despite 60% of the participants having difficulties with an aspect of cognitive function (i.e., semantic fluency), they were resourceful in using personal strategies such as social connectedness to overcome limitations to produce hypertension-related self-care actions. It was concluded that older adults with hypertension and cognitive difficulties experienced challenges in producing self-care related to blood pressure control. Consideration of initial assessments to include cognitive status, progress in self-care production, environmental supports, and personal strategies used to overcome limitations to self-care production may lead to better health outcomes.

SESSION 690 (PAPER)

END OF LIFE - HS PAPER SESSION

PAIN AND ITS TREATMENT IN OLDER HOSPICE/PALLIATIVE CARE NURSING HOME PATIENTS

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The objective of this study was to determine the prevalence of pain, describe its treatment, and determine factors associated with any pain in older patients receiving hospice/palliative care in nursing homes. This cross sectional study included 303 subjects representing 33,413 patients from the 2004 National Nursing Home Survey (91% white, 72% female, 48% aged 85+years). Facility staff were asked if, in the past 7 days, the resident had reported or shown evidence of pain. Medication use data was derived from medication administration records. Information about demographics and health status were derived from Minimum Data Set records. Cancer was the primary diagnosis in only 11.4% of patients. Overall 36.6% had any pain in the previous week. Among those with any pain, 86.4% received some analgesic; specifically, 65.5% received opioids whereas 31.7% received acetaminophen. Those with any pain compared to those without pain had shorter lengths of stay (114 days vs. 156 days, $p<0.01$), and were more likely to have a pressure ulcer (26.3% vs. 15.7%, $p=0.02$), and be incontinent of bowel (40.7% vs. 24.9%, $p<0.01$) and bladder (31.4% vs. 20.5%, $p=0.03$). Pain symptoms were present in over one-third of older nursing home hospice/palliative care patients despite the use of opioids in two-thirds of those with any pain.

AN INTERDISCIPLINARY PROACTIVE PALLIATIVE CARE INTERVENTION: A CREATIVE APPROACH TO END OF LIFE CARE

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The Agency for Healthcare Research and Quality (2003) summarizes vast unmet needs in palliative care and advance care planning. Interdisciplinary teams offer effective and humane strategies to assist patients and their families at the end of life in the acute care environment. However, early intervention in the community in the form of interdisciplinary proactive palliative care (IPPC) may yield even greater benefits. The purpose of this study is to examine the feasibility of an IPPC intervention. The IPPC intervention consisted of the inclusion of advance care planning stations at interdisciplinary senior center health fairs, along with traditional stations such as blood pressure screening. The intervention was developed by an interdisciplinary team including gerontological nursing and social work faculty, a community advocate, a palliative care nurse and a board certified chaplain. The Critical Conditions Planning Guide was used as the advance care planning tool. Process evaluation was conducted by the interdisciplinary team. The results indicate that the IPPC intervention is feasible. Barriers included participants' unfamiliarity with the term advance directives and advance care planning, as well as the logistic placement of the advance directive station. The holistic approach was a strength of the intervention. Based on these findings, IPPC teams show promise in providing palliative care in the community. IPPC, comprised of advance care planning in the community, prior to the typical crisis that families and clinicians face in the hospital setting may be an effective method of providing end-of-life care.

THE EFFECTS OF EARLY PALLIATIVE CARE INTERVENTION ON REDUCTION OF HOSPITAL ADMISSIONS, INTENSITY OF INPATIENT CARE, AND INPATIENT MORTALITY

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Patients with advanced illness often come to the emergency room (ER) when symptoms become too difficult to manage at home. Typically, these patients receive little advance care planning and are often placed on an aggressive treatment pathway in the ER. They therefore have high rates of inpatient utilization and mortality. This prospective study examined the effects of training ER clinicians to identify patients appropriate for consultation by the inpatient palliative care team (PCT) and in performing basic palliative care (PC) services. All patients admitted to two non-profit urban hospitals from the ER over a 1 year period were included in this study. Preliminary results found that of the 847 admissions, 35% of patients appropriate for PC received a referral. 50% of those who should have been referred were not because they were admitted on off hours when the PCT was unavailable. 6.7% of patients referred to the PCT in the ER had admissions avoided and were discharged home on hospice, and 40% were admitted directly to the acute PC unit. Of those patients admitted, those who were referred to the PCT in the ER had a shorter length of stay than those who should have been referred (11.1 days vs 3.7, $p < .0001$). This study shows that ER clinicians can appropriately identify and refer patients for PC, reducing admissions or the intensity of care, and improving quality of life for this complex patient population. However, PCT availability limited a large proportion of consults from occurring until later in the patient stay.

MEDICAL END-OF-LIFE DECISIONS BY MISSOURI PHYSICIANS

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Physicians, patients, and families frequently are faced with difficult end-of-life decisions. Following European methodology not previously used in the United States, we identified recent deaths from Missouri electronic death-certificate files and surveyed certifying physicians. We asked about end-of-life decisions that might have shortened life by: (1) withholding or withdrawing treatments (e.g., mechanical ventilation); (2) increasing medication to control pain or other symptoms; or (3) prescribing or administering medication with the intent of ending life (physician-assisted death). Studying 2203 deaths from the last quarter of 2005, we obtained 704 responses from physicians to anonymous mailed questionnaires. Adjusting for sampling and non-response, physicians reported that 56% of deaths involved end-of-life decisions, including 13% non-treatment decisions, 43% medication use to alleviate pain or suffering with possible life shortening, and 1% (8 deaths) physician assisted dying. In half of these 8 cases, physicians indicated that life was shortened less than 24 hours. Moreover, Missouri physicians were twice as likely to report possible life shortening by increased medications to alleviate pain or symptoms as Europeans. Opioids were by far the most commonly reported drug used. In only 10-13% of cases was life shortening estimated at more than 4 weeks. In 72% of competent patients and 68% of incompetent patients, decisions were discussed with the patient or family members, respectively. In conclusion, medical end-of-life decisions are common, and Missouri physicians may be excessively labeling treatment as either life-terminating or potentially life shortening, which might adversely limit appropriate palliative care at the end of life.

OUTCOME OF PALLIATIVE CARE SERVICES IN THE INTENSIVE CARE UNIT

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Introduction: Palliative medicine is the discipline of medicine where clinical as well as social, cultural and holistic approach meet. However, the financial impact of palliative medicine is not clear. We studied the financial aspects of patient care in the ICU following the establishment of palliative care services and formal residents' rotation. Methods: A retrospective, longitudinal descriptive method was used. Inclusion criteria were age 65 years older, initial admission to the ICU, and co-morbidities numbering 5 or more by ICD-9. The main outcome was total expenditure and length of stay during their hospitalizations. A total of 1,125 patients were enrolled. Periods were divided into two groups: Pre-educational Era (PE: August 2004 to July 2005, $n=620$), and Educational Era (EE: July 2006 to May 2007, $n=505$). During EE, medical residents' integrated curriculum included monthly rotation of inpatient consultation services, multidisciplinary noon conferences of palliative medicine every two months, and interactive web-based communications between medical residents and palliative care team. Results: By implementing palliative care services in the ICU of Huron Hospital, total expenditure per patient were saved 20.0%, \$ 9,905.71 ($p = 0.011$), daily cost saving per patient was \$ 1,132.08. LOS per patient were saved 13.5%, 1.36 days ($p < 0.001$). Also, palliative care services reduced mortality rate slightly. Conclusion: By introducing palliative care services in a teaching hospital's intensive care unit, financial outcomes improved.

FALLS RISK I

CHRONIC MUSCULOSKELETAL PAIN AND THE INCIDENCE OF FALLS IN AN OLDER POPULATION: THE MOBILIZE BOSTON STUDY

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Chronic pain and falls are two highly prevalent and disabling geriatric conditions. Little is known about fall risk related to pain in older adults. The MOBILIZE Boston Study is a population-based longitudinal study of novel risk factors for falls in community-living adults aged >70y. Participants (n=749) recorded falls on monthly calendar postcards. Baseline home interviews and clinic exams collected extensive information on traditional fall risk factors, joint pain (hands/wrists, shoulders, back, hips, knees and feet), pain severity and pain interference with activities (Brief Pain Inventory). We used multivariable negative binomial models to determine incidence rate ratios (IRR) for falls during the 18-month follow-up; covariates included sociodemographics, fall risk factors, medications, mobility performance, and osteoarthritis by clinical criteria. Persons who had more locations of pain, more severe pain, or disabling pain had higher rates of falls [age-adjusted fall rates: 1.2 falls/person-year (p-yr) for >2 sites of joint pain, 0.9 falls/p-yr for single site pain, and 0.8 falls/p-yr for no joint pain]. Persons who had >2 pain sites (IRR=1.55, 95%CI 1.18-2.02), those in the highest tertiles of pain severity (IRR=1.57, 95%CI 1.15-2.15) and pain interference (IRR=1.62, 95%CI 1.21-2.18) had the highest risk for falls, compared to their peers with no pain or in the lowest tertiles of pain scales. In conclusion, chronic pain measured according to number of locations, severity or pain interference with daily activity, increased risk for falls in older persons. Greater attention to prevention and management of chronic pain could have important benefits for fall prevention.

BERG BALANCE SCALE AND INDOOR FALLS IN COMMUNITY-DWELLING OLDER ADULTS: THE MOBILIZE BOSTON STUDY

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The Berg Balance Scale (BBS) is associated with falls in nursing home patients, but its association with falls in community-dwelling older adults is less certain, especially with the clinical cut-point of 45. We examined whether BBS (higher number indicates better balance) predicts indoor falls in the MOBILIZE Boston Study, a population-based cohort of community-dwelling older adults (488 women, 276 men), and whether further subdividing BBS≤45 would better predict falls. We considered baseline BBS continuously (range 0-56), dichotomized at ≤45, and categorized as ≤40, 41-45, >45. We used negative binomial regression to estimate rate ratios (RR) and 95% confidence intervals (CI) for the association of BBS with indoor falls, adjusting for age, history of falls, education, depression, and number of medications. Mean baseline age was 78 years (± 5.4). Mean follow-up was 1.8 years (± 0.7). Average annual falls rates were 0.75 (± 1.0), 0.92 (± 1.8), and 0.35 (± 0.7) for BBS≤40 (n=69), 41-45 (n=57), and >45 (n=638), respectively. Each 5-unit decrease in BBS resulted in a RR of 1.2 (95%CI:1.1,1.3) for falls. Compared with BBS>45, those with BBS≤45 had a RR of 1.7 (95%CI:1.2,2.3), those with BBS of 41-45 had a RR of 1.6

(95%CI:1.1,2.5), and those with BBS≤40 had a RR of 1.7 (95%CI:1.1,2.6). In conclusion, BBS predicted indoor falls regardless of whether BBS was continuous or dichotomized at ≤ 45. Furthermore, those with BBS of 41-45 were as likely to fall as those with BBS≤40. BBS is useful to assess balance and falls risk in community-dwelling older adults.

NURSE'S ATTRIBUTION OF UNDERLYING CAUSES OF FALLS AMONG OLDER ADULT RESIDENTS IN A CCRC

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Over 60 percent of the 1.63 million nursing home (NH) residents fall yearly. Discerning underlying causes of a fall and intervening can prevent additional falls. While falls among older adults occur from multifactorial reasons, current post fall assessment tools used by nurses (RNs) in NHs are limited in explicating root causes. In a prospective study [2004-2007] within a Continuing Care Retirement Community, trained nurses used a 30-item, valid and reliable post fall assessment tool during the intervention year to assess residents. RN assessment included identification of potential fall causes (sub-types) among each fall. SPSS version 7.0 and a Poisson regression analysis were utilized for analysis. Findings: 77 older adults, mean age 89.3 years, experienced 207 falls, 57.1 percent (n=44) were recurrent. Intervention year total falls were reduced by 29.4 percent (p<.001) compared to pre-intervention total falls (n=286). Number of falls/recurrent faller were reduced (p=0.025). Thirty-eight percent (n=79) of falls were injurious: 14 hit their head and 2.8 percent (n=6) died within 1 week post-fall. 193 falls were attributed by RNs to poor safety awareness (75%; n=145), chronicity (64%; n=124), misjudgment (49%; n=96), environment (35%; n=68); behavior (32%; n=62); acute causes (25%; n=48) and/or medication (15%; n=30). We describe resident experiences, physical findings and interventions within fall sub-types.

BODY SWAY AND OUTDOOR MOBILITY LIMITATION AS PREDICTORS FOR RECURRENT INJURIOUS FALLS IN OLDER PEOPLE

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BACKGROUND: Increased body sway predicts an increased risk for falls but the association with recurrent injurious falls remains unclear. The aim of this study was to examine the association of standing body sway with the incidence of physician-diagnosed injurious falls and assess whether self-reported outdoor mobility limitation plays a role in the association. **METHODS:** 415 persons aged 75 and 80 years at baseline underwent force platform balance measurements and reported whether they had limitations in outdoor mobility. Anterior-posterior sway velocity while standing with feet comfortably apart and eyes open was used to categorize participants into groups with low, moderate and high body sway. Information on injurious falls was gathered from hospital and health care centre records for 10 year after baseline. **RESULTS:** During the 10-year follow-up, 231 (56%) participants suffered at least one injurious fall and 100 (24%) subjects had two or more injurious falls. The percent of subjects with recurrent injurious falls was higher among those reporting outdoor mobility limitations compared to those without (30.5% vs. 20.8%). The groups based on body sway did not differ in relation to the incidence of recurrent injurious falls. The group including those with most body sway but no limitations in mobility had the lowest percent of recurrent injurious falls (15.6%). **CONCLUSIONS:** Self-reported limitations in outdoor mobility predicted recurrent injurious falls while standing body sway did not. This may suggest that mobility limitations are more closely related to real-life situations where

injurious falls happen whereas the measurement of sway may represent a physiological aspect of balance control.

RESULTS OF A 7-ITEM KNOWLEDGE/BELIEF QUESTIONNAIRE ON FALL CAUSES FOR HEALTHCARE PROVIDERS

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A 7-item Knowledge/Belief Questionnaire on Fall Causes for Healthcare Providers (HPs) was constructed to assay HPs knowledge/belief of fall causes in older patients. HPs working knowledge of fall causes can influence their management of older patient falls. Questionnaires were administered pre and post-3 month fall prevention educational intervention delivered to hospital HPs. Respondents answered 7 forced-choice "true/false" statements. Hospitals and HPs were de-identified. Data were recoded to "yes" or "no" responses by a trained assistant and Phi Coefficients were computed on un-paired data. Findings: Prior to workshop A, 115 HPs completed the questionnaire, and following the intervention, prior to Workshop B, 87 HPs completed questionnaires (n=202). Not one participant thought it is important to know why they fell. Percentage of respondents agreeing to the statement "most falls in older adults are accidental" fell 11% from 89% (Workshop A) to 77% (Workshop B; $p<0.02$). Agreement that falls occur by acute illness increased 14% from 89% (Workshop A) to 97% (Workshop B; $p<0.01$). Agreement that falls occur by chronic illness rose by 15% from 83% (Workshop A) to 97% (Workshop B; $p<0.01$). No evidence of a rate change was observed to the statement "falls occur from environmental hazards". Moderate correlations were observed between acute and chronic illnesses causing falls (0.54). Responses to "medications cause falls" were similar to acute illness (0.43) and environment causes" (0.53). HPs knowledge about illnesses as causes of falls increased as beliefs falls are accidental decreased.

SESSION 700 (POSTER)

HEALTH PROMOTION-INTERNATIONAL

RELATIONSHIPS BETWEEN RELIGIOSITY, HEALTH, AND HEALTH PROMOTION BEHAVIORS IN OLDER JAPANESE ADULTS

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The purpose of this study was to identify predictors of older Japanese adults' health promotion behaviors by examining relationships between their religiosity and health status; subjective feelings about health; social support/integration; and health promotion behaviors, including physical activity and alcohol and tobacco use through a secondary analysis of a data set from a study of Japanese elders (Liang et al., 1999). A sample of 1,897 community-dwelling Japanese men and women age 65+ were divided into three age groups: 65-74 (n = 1,054), 75-84 (n = 721), and 85+ (n = 122). Multiple linear regression and logistic regression analyses revealed that religiosity was positively related to chronic health problems, depressive symptoms, being employed, satisfaction with health status, social support, physical activity, number of children, and less memory impairment, being unmarried or widowed, and tobacco use. Results of the Sobel test also identified that religiosity partially mediated gender effects on chronic diseases, depressive symptoms, marital status, and tobacco use. Religiosity also partially mediated age effects on memory impairment, marital status, and the number of children. Mobility partially mediated religiosity effects on alcohol use and tobacco use, and marital status partially mediated religiosity effects on alcohol use and tobacco use. The path model fit the data well after removing insignificant paths and performing modification indices. The model explained 21.5% of the variance in physical activity, 17.8% in alcohol use, and 14.0% in tobacco use. Religiosity

was positively related to physical activity and negatively related to tobacco use, but not to alcohol use.

BARRIERS AND FACILITATORS IN HEALTH-RELATED LEARNING AMONG CHINESE THIRD AGERS

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Introduction: Third agers are evidenced as a vulnerable group with lower awareness of self-care and more unhealthy behaviours than others in different ages. This study aims to explore third agers' barriers and facilitators in health-related learning by their educational level. **Methods:** This was a cross-sectional survey conducted from March to June 2005 in Hong Kong. Chi-square tests were employed to examine difference in barriers and facilitators in health-related learning by educational level (3 levels: tertiary, Grade 10-12, \leq Grade 9). Of the 1,625 questionnaires sent out, 800 (49.2%) were returned and 797 were valid for analysis. Results: Of the 797 subjects, 64% were females. Those with tertiary education perceived "no companion" (tertiary, Grade 10-12, \leq Grade 9) (15%, 9%, 8%, $p=.05$) and "too busy" (66%, 38%, 36%, $p<.01$) as the key barriers to health-related learning. On the contrary, those with lower educational level considered "poor memory" (25%, 34%, 31%, $p<.05$), "no financial support" (17%, 32%, 36%, $p<.01$) and "low educational level" (2%, 12%, 26%, $p<.01$) as the barriers. More educated subjects preferred "someone to teach me" in health education (56%, 59%, 42%, $p<.01$) while those with lower educational level considered "having financial support" as the facilitator (33%, 46%, 45%, $p<.01$). **Discussion and Conclusions:** Our results provided useful information on the barriers and facilitators to health-related learning activities among Chinese third agers. Attention should be paid to individuals' educational level and the identified barriers in learning as these might play some roles in affecting their readiness to learn health information.

A COMMUNITY-BASED INTERVENTION FOR PROMOTION OF PHYSICAL ACTIVITY AND GOOD DIETARY HABITS AMONG OLDER ADULTS IN JAPAN

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OBJECTIVES: The purpose of this study was to test the efficacy of a community-based intervention program to improve lifestyle among older adults. **METHODS:** A total of 1177 men and women, aged 65 years and over, participated in this study. An intervention program focusing on increasing the frequency of exercise and improving the variety of food consumption was conducted from 2002 to 2003. To assess the effect of the intervention on lifestyle during a 3-year period, follow-up surveys were conducted in 2003 (baseline) and 2006 (follow-up). The effects of the intervention on attitude to physical activity were assessed using multiple logistic regression analyses, and dietary variety scores were assessed using an analysis of covariance with repeated measures. **RESULTS:** After adjustment for confounding factors, the results showed that the intervention independently affected the initiation of physical activity ($P<0.05$), maintenance of physical activity ($P<0.001$) and improve of dietary variety scores ($P<0.001$). **CONCLUSION:** This community-based intervention was shown to promote a healthier lifestyle in older adults after 3 years. Physical activity and a good dietary habit are very important factors for maintenance of independence among the community-dwelling older adults. Therefore, community-based interventions are an efficient way of promoting a healthy lifestyle in older adults.

ASSOCIATION OF BIRTH OUTCOME WITH LONG-TERM SURVIVAL AND GENERAL HEALTH AT OLDER AGES IN CHINA

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Objectives: Almost all previous studies concerning impacts of fetal growth on health outcome in later life did not investigate association of birth outcome with long-term survival of the cohort members. Present study fills in this research gap by estimating the differences in cumulative survival probabilities from birth to older ages between those cohort members who have normal or low birth weight. We also estimate the association of birth weight with presence of the major chronic disease at older ages. **Methods:** The Fixed Attribute Dynamics (FAD) method and multivariate logistic regressions were employed to analyze data from birth records of 11,689 persons born in Beijing in 1921-54 and clinical examinations conducted during 2004-2006 from 2,085 tracked survivors aged 50-83. **Results:** The FAD analysis indicates that normal birth weight is positively and significantly associated with long-term survival from birth to older ages for both men and women, and the association for men is stronger than women. The risk of having at least one clinically diagnosed chronic disease at older ages among those with normal birth weight (≥ 2500 g) is 27.4 percent ($p < 0.1$) lower than those with low birth weight ($< 2,500$ g), controlling for age and gender. After controlling for 12 additional confounding risk factors, the difference is reduced to 13.7 percent ($p < 0.1$). **Conclusion:** Impairments in fetal growth have long-term effects on survival and general health at older ages. To understand the mechanisms of the effects (e.g. direct or indirect through affecting adult socioeconomic status), much more further research are needed.

SESSION 705 (SYMPOSIUM)

LONG LIFE FAMILY STUDY

Chair: *T.T. Perls, Medicine & Geriatrics, Boston University School of Medicine, Boston, Massachusetts*

Discussant: *A.F. Wilson, National Human Genome Research Institute, Bethesda, Maryland*

The NIA-funded Long Life Family Study (LLFS) has enrolled ~500 families (~4,800 subjects) demonstrating extraordinary clustering for exceptional survival. **Age Reporting:** In a subsample of probands, 23% were validated by birth certificate. Linkage of records to old US census records however revealed that the census age was either in agreement (83%) or within one year (98%) of the subject's reported age. **Uniqueness and Ranking of Families:** A means of ranking families according to clustering for extreme old age and availability of alive subjects for study was created. LLFS families were comparable to New England Centenarian Study (NECS) families and demonstrated much greater exceptional longevity than Framingham Heart Study (FHS) families. **Health and Function:** Compared to the FHS and NECS, diabetes, COPD and peripheral artery disease tended to be less common in LLFS. Continuous measures such as HDL and gait speed were higher. Age-specific comparisons showed patterns of differences consistent with a higher peak, later onset of decline or slower rate of change across age in LLFS participants. **Longevity Pathway Phenotypes:** Favorable traits amongst LLFS offspring were quantified and compared against FHS families. Familial healthy aging scores were significantly higher in LLFS offspring than FHS for protection from cancer, CHD, CVA, diabetes, good cognition and other measures. **Apolipoprotein E:** A preliminary study of 241 LLFS probands compared to ~1,000 age-matched referent cohort subjects without familial longevity revealed that the apoE epsilon-4 allele frequency was significantly lower amongst the LLFS probands.

AGE VALIDATION

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Because of possible bias caused by age misreporting in studies of the oldest old in the United States the LLFS has taken steps to validate reported ages of US probands and their siblings. 23% of the probands were verified by a birth certificate. The most common document was a driver's license followed by a passport. Nevertheless, linkage to census records suggests that age reporting among the LLFS subjects is of high quality. Of the 219 probands without a birth certificate, 79% (174) were matched to an early life census record, among whom the census age was either in agreement (83%) or within one year (98%) of the subject's reported age. The high quality of age reporting is likely related to the subjects' relatively high level of education; over 50% had at least high school diploma or a GED and close to 15% had at least a bachelor's degree.

FAMILIAL CLUSTERING OF LONGEVITY PATHWAY PHENOTYPES IN THE LONG LIFE FAMILY STUDY (LLFS)

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Objective: Do healthy aging profiles cluster in LLFS offspring? **Background:** Many studies find that children of extreme survivors, such as LLFS parental generation, have more favorable health profiles for their age/sex. **Methods:** We created trait-specific scores, quantifying each family's degree of clustering of favorable trait values, using expected age/sex percentiles from Framingham (FHS). We compare corresponding trait-score distributions between LLFS and age/sex matched FHS offspring (Kolomogorov-Smirnov). **Results:** Familial healthy aging scores were significantly higher in LLFS offspring than FHS for protection from cancer, CHD, CVA, diabetes, and good cognition, pulse-pressure, glucose, cholesterol, HDL and triglycerides ($p < 0.0001$). Multiple favorable traits clustered simultaneously in the same families more often in LLFS (CHD and Cancer protective scores correlated 0.31 in LLFS vs. -0.01 in FHS; 26% of LLFS families in the most protective quartile for 6+ traits simultaneously vs. 15% in FHS). **Conclusions:** LLFS offspring are enriched for familial healthy aging profiles.

HEALTH AND FUNCTION OF PARTICIPANTS IN THE LONG LIFE FAMILY STUDY: A COMPARISON WITH OTHER COHORTS

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We recruited families with a history of longevity for the Long Life Family Study (LLFS). To evaluate health and function in LLFS, we compared them to individuals from the Cardiovascular Health Study, the Framingham Heart Study, and the New England Centenarian Study (NECS). We found that diabetes, chronic pulmonary disease and peripheral artery disease tended to be less common in LLFS. Continuous measures showed more consistent differences. Pulse pressure and triglycerides were lower, high density lipids were higher, and a perceptual speed task and gait speed were better in LLFS. Health history was similar between LLFS and the NECS probands, another long-lived cohort. Age-specific comparisons showed patterns of differences that would be consistent with a higher peak, later onset of decline or slower rate of change across age in LLFS participants. These findings suggest several prior-

ity phenotypes for inclusion in future genetic analysis to identify loci contributing to exceptional survival.

A FAMILY LONGEVITY SELECTION SCORE (FLOSS): RANKING SIBSHIPS BY THEIR LONGEVITY AND AVAILABILITY FOR STUDY

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We developed a metric to rank families for selection into a family study of longevity. Our measure, the "Family Longevity Selection Score" (FLOSS), is the sum of two components: (1) an estimated family longevity score built from birth-, gender-, and nation-specific cohort survival probabilities and (2) a bonus for older living sibs. We examined properties of FLOSS-based family rankings using data from three studies: the New England Centenarian Study, the Framingham Heart Study, and screenees for the Long Life Family Study. FLOSS-based selection yields families with exceptional longevity, satisfactory sibship sizes, high ages and numbers of living sibs. Parameters in the FLOSS formula can be tailored for studies of specific populations or age ranges or with different conditions. The first component of the FLOSS also provides a conceptually sound survival measure to characterize exceptional longevity in individuals or families in various types of studies and correlates well with later-observed longevity.

HEALTH AND FUNCTION OF PARTICIPANTS IN THE LONG LIFE FAMILY STUDY: A COMPARISON WITH OTHER COHORTS

A.B. Newman¹, N.W. Glynn¹, P. Sebastiani², T.T. Perls³, R. Mayeux⁵, K. Christensen⁶, E. Simonsick⁴, E. Hadley⁴, 1. *Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania*, 2. *Boston University School of Public Health, Boston, Massachusetts*, 3. *Boston University Medical Center, Boston, Massachusetts*, 4. *National Institute on Aging, Bethesda, Maryland*, 5. *Columbia University, New York City, New York*, 6. *University of Southern Denmark, Odense, Denmark*

To evaluate health and function in families of the LLFS, we compared them to individuals from the Cardiovascular Health Study, the Framingham Heart Study, and the New England Centenarian Study (NECS). We found that diabetes, chronic pulmonary disease and peripheral artery disease tended to be less common in LLFS. Continuous measures showed more consistent differences. Pulse pressure and triglycerides were lower, high density lipids were higher, and a perceptual speed task and gait speed were better in LLFS. Health history was similar between LLFS and the NECS probands, another long-lived cohort. Age-specific comparisons showed patterns of differences that would be consistent with a higher peak, later onset of decline or slower rate of change across age in LLFS participants. These findings suggest several priority phenotypes for inclusion in future genetic analysis to identify loci contributing to exceptional survival.

APOLIPOPROTEIN E AND FAMILIAL EXCEPTIONAL LONGEVITY

N. Schupf, R. Mayeux, *Columbia University, New York City, New York*

To compare the likelihood of carrying an Apolipoprotein $\epsilon 4$ or $\epsilon 2$ allele in members of the Long Life Family Study (LLFS) with the likelihood of carrying these alleles in comparison cohorts. The $\epsilon 4$ allele of the gene for Apolipoprotein E (APOE) has been associated with increased mortality and the $\epsilon 2$ allele with decreased mortality, though inconsistently. Methods. We used logistic regression to compare APOE genotype and allele frequencies in Caucasian LLFS probands (n=241)

with similarly aged Caucasians without a family history of longevity (NIA-LOAD, n= 227, WHICAP, n=822). Results. Among LLFS family members, the proportion carrying an $\epsilon 4$ allele was 7.5%, compared with 17.3% among NIA-LOAD controls and 22.6% among WHICAP participants (OR= 0.4, 95% CI, 0.2-0.9). The proportion carrying an $\epsilon 2$ allele was 20.7% compared with 18% and 13.1% of the comparison cohorts (OR=1.2, 95 %CI, 0.7-1.9). Conclusion. These results suggest a role for APOE in familial exceptional longevity

SESSION 710 (SYMPOSIUM)

MINING HIDDEN TREASURES IN MULTIPLE DATA SOURCES

Chair: L. Phillips, *School of Nursing, UCLA, Los Angeles, California*
Discussant: E. Beattie, *Queensland University of Technology, Queensland, Queensland, Australia*

Nursing research with elders designed to build gerontological nursing science is complex because of the heterogeneity of the population, the unnatural settings in which some elders reside, the interdependence of elders and the others who reside with them, and pre-conceived ideas of researchers about the proper "lens" and proper measurement, data collection and analysis techniques. Designing research that accounts for these complexities and also yields valid and credible results is challenging. The objective of this symposium is to describe some of the challenges encountered and lessons learned in designing and implementing a variety of gerontological nursing research projects. The focus will be on raising issues about different ways to approach the design and implementation of projects including measurement and analysis. We will consider biobehavioral data sources as well as those involving narrative data. The first paper will focus on the challenges of collecting bio-specimens from frail elders in nursing home settings and ways these challenges affect the interpretation of results. The second paper will address on the analysis of longitudinal data features ways to analyze biologic and behavioral patterns rather than simply testing for difference in central tendencies. The third paper will focus on issues related to studying end-of-life and the ways context and the "researcher lens" can affect what questions are asked and the conclusions drawn. The final paper will raise some of the issues involved in finding and using archived data both for exploring phenomenon and testing hypotheses.

REFINING BIO-SPECIMEN LINKS TO HEALTH STATUS IN OLDER ADULTS

J. Mentis, *School of Nursing, UCLA, Los Angeles, California*

Analysis of biological specimens, such as saliva and urine, in research with older adults can provide empiric measures of health status. Matching the appropriate specimen to health parameter must consider patient characteristics, such as age, gender, medical diagnoses, and frailty. For example, while urine specific gravity may detect hydration problems in relatively healthy elders, it is not the best measure in frailer, incontinent elders, unless renal function is considered. Is salivary osmolality, a relatively new bio-measure more effective in ascertaining hydration problems in frail elders? The purpose of this presentation is to use data from two different studies; one on the detection of dehydration and another on reducing oral microbes as exemplars to illustrate methods issues in the determination of appropriate bio-measures, collection techniques and analysis issues, when using biological specimens in research with older adults.

CAPTURING THE TOTALITY OF END OF LIFE CONVERSATIONS

M. Cadogan, *UCLA School of Nursing, Los Angeles, California*

End of Life communication has focused predominantly on discussions regarding preferences for treatment and interventions such as cardiopulmonary resuscitation, artificial nutrition and hydration, hospitalization, and ventilator use. These discussions may target current or

future states with the aim of reaching a decision about treatment choices. Less well documented are the methodological issues involved in broader discussions of value based decisions within the context of overall goals of care. Using data from three studies of end of life conversations with nursing home residents, families, and providers, this presentation will examine the effects of timing, language, culture, spirituality, and disease burden on the quality of end of life conversations. Unique aspects of the nursing home environment that contribute to the challenge of data collection and data quality will be highlighted.

UNCOVERING PATTERNS IN BIOBEHAVIORAL LONGITUDINAL DATA

L. Woods, *UCLA, Los Angeles, California*

Behavioral symptoms of dementia (BSD) remain among the most challenging problems faced by elders, clinicians and caregivers with prevalence ranging between 66% to 98%. Understanding the biological basis for these behaviors is crucial for the development of relevant interventions. One limitation to this understanding is the analysis methods used to detect the association between BSD and biological variables. Given the heterogeneity in this vulnerable population, statistical methods that assume linearity over time, when the pattern may be quadratic or cubic, have limited application. Detecting BSD patterns in longitudinal data and mapping these patterns to biological variables that guide interventions continue to challenge researchers. Random effects analysis, allowing individuals different trajectories over time can uncover BSD patterns. This presentation will discuss the use of random effects analysis, with examples, to detect individual BSD patterns and to uncover the association between biological variables, such as cortisol, and BSD in longitudinal data.

DISCOVERING TREASURES IN ARCHIVED DATA

G. Guo, L. Phillips, *School of Nursing, UCLA, Los Angeles, California*

Enormous amounts of data are collected every day by government agencies, university faculty and students, private organizations, and many other agencies. Although each data collection has its specific purposes, the wealth of data available in the public realm provides gerontological nurse researchers a rich source for exploring ideas, and analyzing and testing hypotheses in their own research. This paper focuses on major methodological issues related to using archived data in the public domain. Pros and cons of conducting secondary data analysis will be discussed. Examples will be given to demonstrate challenges and strategies in using archived data.

SESSION 715 (PAPER)

NUTRITION - HS PAPER SESSION

SWALLOWING DYSFUNCTION IS UNRECOGNIZED IN COMMUNITY-DWELLING OLDER ADULTS

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1. Wake Forest Univ. School of Medicine, Winston-Salem, North Carolina, 2. East Carolina University, Greenville, North Carolina

Purpose: We recently reported the unexpected finding of silent aspiration (entry of liquids into the airways without a cough reflex) in approximately 30% of community-dwelling adults age > 65 years; whereas, aspiration is rare in young adults. Given the potential implications of this finding for both community-dwelling and dysphagic adults, it was important to determine if our previous findings in community-dwelling older adults were repeatable, and determine factors affecting the prevalence of aspiration. Methods: Community-dwelling older adults (n=14, mean age = 76 years), without a history of neurological disease/insult or swallowing complaints, participated. Penetration Aspiration Scale (PAS) scores were endoscopically assessed as a function of liquid type (water; skim, 2%, & whole milk), delivery method (cup & straw), and bolus volume (5, 10, 15, & 20 ml). Results: Thirty-three percent of the

participants aspirated, and 83% of the aspiration events did not elicit a cough reflex. A repeated measures ANOVA found PAS scores differed significantly by liquid type ($p < .001$) and delivery method ($p = .021$), but not by volume ($p = .089$). In general, PAS scores were higher for milk vs. water and for straw vs. cup drinking. Conclusion: The findings of this study support our previous findings that the proportion of aspiration in community-dwelling adults over 65 years of age was 30% (95% CI, 12%-54%). In addition, older adults who aspirate are more likely to aspirate on milk vs. water and with straw vs. cup drinking. Future investigations placing silent aspiration in a gerontological context are warranted.

DIETARY KETOSIS IMPROVES MEMORY FUNCTION IN MILD COGNITIVE IMPAIRMENT

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The prevalence of Alzheimer's disease (AD) and of obesity and type 2 diabetes are projected to increase dramatically in the near term. Peripheral hyperinsulinemia and accompanying central hypoinsulinemia contribute to neurodegeneration by accelerating beta-amyloid and proinflammatory cytokine expression and by inhibiting long-term potentiation. Recent preliminary data indicated that insulin-sensitizing treatment can improve memory acutely in subjects with AD and Mild Cognitive Impairment (MCI). We reasoned that dietary ketosis might be effective in enhancing memory function by correcting hyperinsulinemia and, possibly, because ketone metabolism itself might be beneficial. We randomly assigned 23 older adults with MCI to a high carbohydrate or very low carbohydrate (< 20g/day), ketogenic diet for six weeks. Body composition, metabolic parameters, and memory and mood measures were obtained before and after the intervention. There was no group difference in demographics, level of memory impairment, or metabolic parameters before the intervention. At the end of the intervention period, we observed significant reductions in weight ($p < .0001$), waist circumference ($p < .0001$), and glucose levels ($p = .03$) for the low carbohydrate group. Furthermore, verbal memory function was significantly improved for the low carbohydrate subjects ($p = .01$). Depressive symptoms were not affected by either diet ($p = .56$). These findings indicate that ketosis induced by very low carbohydrate consumption, even in the short-term, can improve cognitive function in older adults with greater risk for Alzheimer's disease. To our knowledge, this is the first controlled study of ketosis in this population. Further investigation of this intervention is warranted to evaluate its preventive potential and mechanisms of action

THE VALIDITY OF NUTRITION SCREENING INITIATIVE DETERMINE CHECKLIST RESPONSES IN OLDER GEORGIANS

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The Nutrition Screening Initiative DETERMINE Checklist (NSI) is a tool used nationally to assess nutrition risk in those seeking to participate in the Older Americans Act Nutrition Programs (OAANP). This study examined the ability of the NSI to evaluate nutrition risk status using the data from the Georgia Advanced Performance Outcomes Measures project. We specifically compared the agreements among six NSI and matched question pairs (eating < two meals daily, eating few fruits and vegetables or dairy, eating most meals alone, food security and using three or more medications daily). The study sample includes all new OAANP participants and waitlisted people who completed all NSI items and matching questions in the self-administered survey from July to mid-November, 2008 (n=924, mean age 75.0 ± 9.2 years, 68.8% women,

26.1% black). 94% of our sample provided at least one discordant response (mean 2.1 ± 1.1 responses); questions regarding food intake most frequently yielded discordant responses. All six NSI and matched question pairs showed statistically significant discordance (all $p < 0.01$). Those who were black and living alone were more or less likely to provide mismatched answers, respectively. In particular, food insecure individuals were less likely to provide mismatched answers for food intake questions. This study reinforces findings from previous studies on the limited ability of the NSI to reliably identify older adults at nutritional risk. Further investigation into the cause(s) of discordant responses and validity of these data sources is needed to ensure an accurate assessment of the nutritional status of older Georgians.

THE TRADITIONAL OKINAWA DIET: A UNIQUE NUTRITIONAL APPROACH TO REDUCING RISK FOR AGE ASSOCIATED DISEASE

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Background/Purpose: The people of Okinawa have among the world's longest life expectancies and lowest rates of age associated disease. This healthy aging phenomenon may be linked in part to the low caloric/high nutrient density traditional diet. **Methods:** Randomized cross-over design. Participants were 138 healthy Americans aged 40 to 69 years (average age 50.0 ± 7.2 years old, 51 men and 87 women). For two weeks, participants followed their typical Western style diet, then were randomly assigned to receive four weeks of traditional Okinawa diet. The intervention phase included the provision of specially prepared single-portion vacuum packed meals. **Outcome measures** were multiple and included: cardiovascular risk factors such as blood pressure, and other risk factors for age associated disease, as well as potential indicators of aging related pathology, such as levels of oxidative stress. **Results:** Preliminary results include significant reduction in body weight and decreases in 24 hour urinary excretion of sodium (significance of between group differences ranged from $p=0.032$ to 0.0002). Improvements in blood pressure were also impressive. Systolic and diastolic blood pressure decreased 2.6 mmHg (95% CI -4.3, -1.1), and 2.1 mmHg (95%CI -3.1 -1.0), respectively. Other health indicators are currently under analysis. **Conclusions:** The Okinawa diet, although unique in culinary approach, shares similar nutrient composition and food groups (vegetable rich, low in sodium, saturated, trans, and total fat) with NIH and other scientifically designed healthy dietary regimens. Therefore it may offer a unique, naturally occurring, Pacific(Eastern)nutritional approach to preventing and treating cardiovascular and other age associated diseases.

SESSION 720 (SYMPOSIUM)

BROADENING THE POOL OF SOCIAL WORK FACULTY ENGAGED IN AGING RESEARCH

Chair: C.M. Mehrotra, *The College of St. Scholastica, Duluth, Minnesota*

Discussant: S.M. Stahl, *National Institute on Aging, Bethesda, Maryland*

With support provided by NIH and Hartford Foundation, we have developed a training program to build and sustain a community of social work faculty committed to conducting aging research. Program design includes an initial summer institute, ongoing consultation, a mid-year meeting, and a follow-up institute. Evaluation data indicate that the program has been effective in expanding the pool of faculty members engaged in aging research. Of the 45 participants in the first three cohorts, 31 have been successful in securing research support from agencies such as the National Institute on Aging, National Institute on Drug Abuse, Veterans Administration, Center for Medicare & Medicaid Serv-

ices, and private foundations. The objective of the symposium is to share with the convention audience four examples of research conducted by program participants representing diverse institutions, backgrounds, and research interests. The presenters describe the funding mechanisms they used to secure grant support, outline the activities they have undertaken, present research methods and findings, and discuss implications of their research. The presenters and their topics include: Butler examines how individual, sociocultural and environmental factors affect retention of homecare workers; Davitt focuses on racial/ethnic disparities in home healthcare; Moore assesses the outcomes of a caregivers workshop on communicating with healthcare professionals; and Rosen focuses on providing depression care for older substance abusers at community agencies. They also share their experience with seeking external funding and outline what they learned during this process. Discussion focuses on how similar training programs may be designed to stimulate research in other disciplines.

BUILDING A RESEARCH AGENDA: RACIAL & ETHNIC DISPARITIES IN MEDICARE HOME HEALTH CARE

J.K. Davitt, *School of Social Policy & Practice, University of Pennsylvania, Philadelphia, Pennsylvania*

This research agenda evolved out of earlier work studying changes in access to Medicare home health care after the Balanced Budget Act of 1997 (BBA), which showed that there were racial disparities in use of this benefit post-BBA. Thus arose the focus of a long term research agenda to understand the contributing factors which affect the relationship between race/ethnicity and access to/outcomes of Medicare home health care. This presentation will focus on methods used (secondary analysis with qualitative interviews), strategies for supporting this agenda (foundation funding for preliminary work to NIA-R21 funding), and the resources necessary to successfully pursue a long term research agenda (e.g. initial reviewers, employing methodologists, recruiting consultants). In particular, the presentation will discuss the ability to obtain funding for secondary analysis of existing data, connecting preliminary work to future research phases (connecting the dots of results), and how to build an intervention study.

FINDINGS ON PROVIDING DEPRESSION CARE FOR OLDER ADULT SUBSTANCE ABUSERS AT A COMMUNITY AGENCY

D. Rosen, *Social Work, University of Pittsburgh, Pittsburgh, Pennsylvania*

Depressive disorders among opiate abusers have detrimental effects on their well-being and ability to refrain from illegal drug use. This K-08 Award from the National Institute on Drug Abuse focuses on the adaptation, testing, and delivery of an intervention for older adults with co-occurring substance abuse and depression disorders and the development of a treatment model for older adults into the standard of care offered by substance abuse facilities. Pilot work with older methadone clients identified Problem Solving Therapy (PST) as the most appropriate intervention for this population. PST is an empirically tested treatment approach for older adults for the treatment of depression. The research site is a methadone clinic where a third of the clients are over the age of 50. Results from a randomized clinical trial comparing 40 participants receiving the PST intervention to 40 participants receiving treatment as usual will be presented.

IMPACT OF WORKER AGE ON TURNOVER AMONG HOME CARE WORKERS

S. Butler, *University of Maine/School of Social Work, Orono, Maine*

Maintaining an adequate supply of workers to provide the daily care needed by our nation's elders is a primary challenge in our long-term care system. With a trend toward community-based care, this shortage is particularly severe in home care. Encouraging older workers to enter or remain in this field is one potential solution to this workforce crisis. In order to investigate factors influencing retention and turnover among

personal care attendants in home care and the impact of worker age on these phenomena, funding was secured from the National Institute on Aging through an Academic Research Enhancement Award. This paper will describe the process of securing funding, the research design of this 18-month study, the involvement of social work and nursing students in project activities, and Time 1 survey findings. The influence of respondent age (n=261, mean age=46) on job experience and job tenure will be highlighted and implications discussed.

COMMUNICATING EFFECTIVELY WITH MEDICAL PROFESSIONALS: EVALUATION OF A FAMILY CAREGIVERS CURRICULUM

C.D. Moore, *Skidmore College, Saratoga Springs, New York*

Family caregivers often help patients use and understand health-related information, and provide support before, during, and after medical encounters (Glasser et al. 2001; Prohaska & Glasser, 1996; Silliman et al., 1996). The National Family Caregivers Association developed a standardized workshop curriculum to promote quality communication among medical professionals, family caregivers, and patients: Communicating Effectively with Health Care Professionals. Kurt Freeman (PI) and Crystal Dea Moore (co-PI) were funded by the Pilot Program for Caregiver Assistance (Veterans Health Affairs) in 2007 to evaluate the curriculum. Total funds awarded through 9/30/2009 were \$324,727. Family caregivers of 105 older veterans having a chronic illness were randomized into three conditions: face-to-face workshop, DVD adaptation, or usual care. A pre-test and three-month post-test telephone interview assessed family functioning, caregiver burden, and quality of communication with the veteran's healthcare team. Findings indicate that the curriculum is associated with self-reported increases in health-related communication skills for participants.

SESSION 725 (POSTER)

FINANCIAL SECURITY AND INSURANCE

IMPACT OF PENSION POLICY ON THE SUBJECTIVE WELL-BEING OF OLDER ADULTS: AN ANALYSIS OF LONGITUDINAL MULTI-LEVEL DATA

E. Calvo Bralic¹, C. Mair², 1. *Center for Retirement Research at Boston College, Chestnut Hill, Massachusetts*, 2. *North Carolina State University, Raleigh, North Carolina*

A basic assumption of most social policies is that they will improve well-being. Financial indicators are very informative about the economic well-being of older adults. However, we cannot say that older adults live well if they are in poor health or deem their lives undesirable. This study assesses the influence of old-age public pension policy on the well-being of older adults, with a focus on two outcomes that have been largely overlooked in previous cross-national research on pension policy: variation across countries with respect to subjective health and feelings for older adults. Drawing data from multiple sources, this study created a unique unbalanced panel dataset spanning from 1980 to 2007, and including 360,064 individual-observations across time (level-1), clustered within 256 country-observations across time (level-2), clustered within 101 high, middle, and low-income countries (level-3). Data is analyzed with a multilevel model that focuses on the effect of the level of public pension policy individualization and total public pension expenditures on both health and mental health. The set of predictors also include indicators of cultural values (e.g. traditional/secular and survival/self-expression) and economic prosperity, as they are likely to directly influence well-being of older adults and to moderate the effect of pension policy. Control variables include individuals' characteristics, demographics, living arrangements, and structural characteristics of welfare states.

DETERMINANTS OF WEALTH DECUMULATION IN LATER LIFE: A MULTIDISCIPLINARY PERSPECTIVE

D. Gray, *Gerontology, University of Massachusetts Boston, Arlington, Massachusetts*

Workers are more responsible for their financial security than ever before. The decision to decumulate involves converting assets accumulated in the working years to an income stream in later life. Asset draw down was reviewed from within a single country (United States) as social insurance and medical costs affect elders' consumption decisions. The factors influencing the decision to decumulate are complex and dynamic. Key determinants to consider when devising a wealth decumulation strategy are longevity, inflation, and investment risk. This study examined wealth decumulation by older adults from a multidisciplinary perspective. This multidisciplinary framework is based upon standard economic models of individual choice and expands the determinants of these choices to include social factors that have been neglected in economic analyses. The goal is to produce more powerful models of individual behavior that will provide insights into the ways decumulation decisions are made and change over time.

THE GERMAN LONG-TERM CARE INSURANCE SYSTEM: LESSONS FOR THE UNITED STATES

E. Robbins, *Miami University, Oxford, Ohio*

Like the U.S., Germany must consider financing mechanisms to meet the needs of a growing population of older adults who require long-term care. The long-term care (LTC) insurance system in Germany (Pflegeversicherung), established in 1994, legislates mandatory LTC insurance for all residents. Under this system, public LTC insurance is funded through payroll contributions from employees with employer contributions. Those who opt out of the public system, by meeting strict income criteria, are obligated to purchase private LTC insurance which guarantees at least as much coverage and benefits as the public system. Such a system ensures that a LTC insurance policy covers nearly the entire German population thus, relieving some of the burden on the means-tested social assistance programs. In addition to public records and an extensive literature review, structured interviews with German LTC insurance system experts provide the basis for this study. Although a universal long-term care schema may be far in the future for the U.S., the German system does provide guidelines for establishing alternative financing mechanisms for long-term care. Results of this study indicate that the German system has encountered many of the same issues faced by the U.S. regarding financing long-term care, including resistance to a universal system and degree of payroll contributions. Drawing on the experiences of the German LTC insurance system, the U.S. should move toward a stronger focus on financing community based long-term care as well as ensure that programs are in place to educate and support home caregivers

ASSESSING FINANCIAL SECURITY WITH SUBJECTIVE MARKERS: THE NEGATIVE EFFECT OF NEUROTICISM

Z.D. Gassoumis, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

This research examines the role of neuroticism on subjective assessments of financial security in adults who are retired or approaching retirement. Although subjective financial security (SFS) is being used increasingly in research, few studies use it as a dependent variable. To gain a better understanding of SFS and its precursors, we investigate its structure and how it relates to the personality construct of neuroticism. Financial security in retirement is usually assessed using objective measures: typically, income and wealth. However, this treatment of financial security fails to consider an individual's norms and expectations, which are driven by sociological and psychological phenomena. Thus, researchers are using more measures of SFS to augment the study of financial security in retirement. This study investigates SFS using 7,368 cases from the 2006 Health and Retirement Study (mean

age=65.9, range=52-104). Building on Hershey's retirement security model, structural equation modeling is used to detect a relationship between neuroticism and SFS. Since neuroticism stays fairly stable in aging individuals, the hypothesized directionality is from neuroticism to SFS. The model also includes age, education, income, and wealth to adjust for the effects of these variables on SFS. Several models are compared to identify the best model for ascertaining the effect of neuroticism on SFS. Results suggest that high neuroticism has a negative impact on SFS ($\beta=-0.228$, $t=-19.3$). The final model has good fit, with a RMSEA statistic of 0.0431. These findings can guide future research in the economics of aging, as well as provide insight for financial planning professionals.

THE TYRANNY OF COMPOUNDING EXPENSES: ARE MUTUAL FUND FEES BLEEDING RETIREMENT ACCOUNTS DRY?

S. Neufeld, *Wayne State University, Detroit, Michigan*

The current financial crisis has taken a heavy toll on individuals' retirement savings held in tax deferred accounts such as 401(k) or 403(b) plans. Even before the crisis, these savings were deemed insufficient. The Pension Protection Act (2006) aimed to increase the amount saved by allowing, for example, automatic enrolment, escalation, and investment allocation. However, the problem of low returns on the savings invested in retirement accounts has been largely ignored. A major, mostly unrecognized, obstacle to rebuilding balances in retirement accounts is the fraction of market gains that are skimmed off as mutual fund fees and other expenses. Even over relatively short investment periods, for example the last 20 years, the financial services industry captures the bulk of the market returns – but the investor takes all of the risk. Yet, woefully absent in the financial literature is a detailed analysis of investment returns on retirement savings that takes into account inflation, and actual market and mutual fund performance over many investment horizons. Our analysis shows that investors receive a declining proportion of the gain in equity markets with increasing time horizon. Moreover, investors fare even worse with bond and money market funds. Thus, while shortfalls in the amounts saved for retirement present a problem, a more pressing issue is the returns on savings already invested. We conclude that for retirement security to be ever achieved, major reforms in the governance of tax deferred plans are required. Our recommendations include restricting investments of retirement funds to low-cost (<20bp) index funds.

FACTORS ASSOCIATED WITH LONG-TERM CARE PLANNING AMONG OLDER ADULTS IN THE METROPOLITAN OMAHA, NEBRASKA AREA

P. Quinn, C.M. Kelly, *Gerontology, University of Nebraska at Omaha, Omaha, Nebraska*

Purpose: This study seeks to understand the factors associated with long-term care (LTC) planning by older Nebraskans, in an effort to assist individuals in preparing for their LTC needs (e.g., home and community-based services, assisted living facilities, skilled nursing facilities). The present study was designed to answer two research questions: (1) what distinguishes those who plan for LTC vs. those who do not; and (2) what distinguishes those who intend to pay for LTC themselves vs. those who will depend on public programs (e.g. Medicaid). Methods: Survey data were collected from a stratified random sample of adults age 60 and over ($n=651$) in the six-county greater Omaha metropolitan area. The survey contained a question regarding LTC planning, along with demographic and background items that could potentially explain variation among older adults in planning behavior. Ten explanatory variables were included in the model: age, gender, education, religious affiliation (Catholic vs. not), religious attendance, income, subjective rating of overall health, current functional ability, marital status, and awareness of LTC insurance. Data were analyzed using nested logistic regression models. Results: Findings indicated that those most likely to

have a plan for LTC were female, unmarried, with higher income, and aware of the availability of LTC insurance. Higher income was associated with paying for one's own LTC. Discussion: This research suggests that many older Nebraskans lack accurate information about LTC (available services, costs, payment options), particularly males and low-income elders. Education efforts targeting these populations are needed to address this gap in knowledge.

DISPARITIES IN THE OUT-OF-POCKET FINANCIAL BURDEN OF MEDICAL CARE AMONG RECENTLY-ARRIVED OLDER IMMIGRANTS

S. Choi, *Department of Social Work, State University of New York, Binghamton, Binghamton, New York*

Objective: Recently-arrived older immigrants are likely to be greatly affected by dramatically increasing out-of-pocket (OOP) expenditures for medical care due to their limited insurance options. This study examined disparities in the OOP financial burden of healthcare by immigrant status. Methods: The 2005 Medical Expenditure Panel Survey linked to the 2004 National Health Interview Survey was analyzed guided by the Andersen model. OLS models were tested for four DV's: total and OOP medical expenditures, and the percentage of total expenditure and income spent for OOP payments. Immigrant status (IV) had three categories ($N=3,454$; 65+): 1) late-life immigrants with less than 15 years of residence in US (recent immigrants; $n=77$); 2) longer-term immigrants ($n=392$); and 3) the U.S.-born ($n=2,985$). The SAS survey procedures were used to account for the complex sampling design. Results: The findings indicate no differences in the total and OOP medical expenditures, and the proportion of expenditures paid out-of-pocket across the three groups, after controlling for predisposing (e.g., age, gender, ethnicity), enabling (e.g., insurance status), and need factors (e.g., 12 medical conditions). However, recent immigrants spent a higher proportion of their income for OOP medical payments compared to the U.S.-born ($p=.020$) and longer-term immigrants ($p=.009$). In 2005, OOP medical payments accounted for 18% of recent immigrants' income (median), while it was only 4.6% and 3.9% among the U.S.-born and longer-term immigrants, respectively. Conclusion: Considering the higher OOP financial burden of healthcare among recent immigrants, appropriate policies should be considered (e.g., providing affordable health insurance options).

SESSION 730 (PAPER)

HOUSING

COMMUNITY-BASED LONG-TERM CARE: HOW RESIDENTIAL SETTING AND LIVING ARRANGEMENT INFLUENCE ELDERLY PUERTO RICANS' KNOWLEDGE AND USE OF SERVICE

N.W. Sheehan, M. Guzzardo, *Human Development & Family Studies, University of Connecticut, Storrs, Connecticut*

Despite growing concern, there is relatively little information about the barriers that limit Puerto Rican elders' access to community-based long-term care (LTC) services. The present study, using focus group methodology, explored Spanish-speaking Puerto Rican elders' service needs and experiences utilizing LTC services. Three focus groups ($N=28$) were convened, and each group represented a distinct type of residential setting: Latino senior housing, conventional senior housing, and community living. Analysis of focus group data revealed common and distinct themes. Limited family support was a major theme across all groups. Simultaneously, elders in Latino senior housing reported few unmet needs, satisfaction with services, and importance of the housing staff. However, participants in the other groups encountered a number of problems accessing formal services. Elders living in both conventional senior housing and community settings identified language barriers as preventing their use of formal services. Elders living in con-

ventional senior housing also reported that little or no help from neighbors or housing staff prevented their needs from being met. While these elders expressed a preference for formal services because families are unavailable, they reported high levels of unmet need. The majority of community-living elders expressed dissatisfaction with the quality of formal services and/or restrictive eligibility service requirements. While frustrated with the formal service system, these elders acknowledged the vital role of the local Latino senior center for meeting their psychosocial needs. Findings underscore the impact of multiple levels of environmental influences on minority elders' utilization of services.

THE CHALLENGES OF HOUSING CHRONICALLY HOMELESS OLDER ADULTS: THE ROLE OF PERMANENT SUPPORTIVE HOUSING

J.G. Gonyea¹, S.S. Bachman², *1. Social Work, Boston University, Boston, Massachusetts, 2. Boston University, Boston, Massachusetts*

The federal government has made it a top priority to end chronic homelessness within the next ten years. The government's definition of chronic homelessness includes homeless individuals with a disabling condition (substance disorder, serious mental illness, developmental disability, or chronic physical illness or disability) who have been homeless either: 1) continuously for one whole year; or 2) four or more times in the past three years. Although chronically homeless people represent only a small share—about 10% to 20%—of the total homeless population, these individuals constitute the most costly subpopulation of homeless people. It is increasingly recognized that for chronically homeless people the solution is permanent supportive housing, which requires the integration of affordable housing and supportive services. Yet, nationwide most of the emerging supportive housing programs have not focused specifically on older adults. An exception is Hearth, Inc, a non-profit organization in Boston MA, with the mission of ending elder homelessness. In this study, we engaged in a comparative analysis of three subpopulations of HEARTH 136 supportive housing residents: the chronically homeless, the homeless, and the marginally housed. Our analysis revealed both similarities and unique differences in these three populations in terms of physical and mental health status, functional ability, and social isolation. We propose policy recommendations for appropriate ways to finance both the affordable housing and supportive services that are needed to assist chronically homeless and disabled older adults to achieve housing stability and receive care for their chronic conditions.

DEVELOPMENTALLY DISABLED OLDER ADULTS IN GA: RURAL, METROPOLITAN, AND URBAN HOUSING AVAILABILITY

T. Cermak, A. Pearman, *Gerontology, Georgia State University, Atlanta, Georgia*

Older adults with developmental disabilities, such as autism or Down's syndrome, often experience similar age-related health changes as their typically developing peers. However, they also face challenges associated with aging with a life-long disability. Because of the increases in life expectancy for people with developmental disabilities, there is a growing need for long-term residential care. Urban, metropolitan, and rural areas may differ in the availability of viable long-term care housing options for disabled older adults. The current study examines a sample of 90 counties in the state of Georgia. Counties were chosen based on data obtained from the American Community Survey administered by the U.S. Census Bureau. Data are reported by county type for the following variables: average population, racial make-up, income, age, education, disability status of older adults, types of long-term care facilities available in each county, and number of available beds. I present these descriptive findings in a way that illustrates the dearth of long-term care options for disabled older adults, particularly in rural counties. Understanding the housing options for disabled older adults is an

important process that has implications for both policy and social service planning.

SUSTAINABLE HOUSING DEVELOPMENT FOR OLDER ADULTS: UNDERSTANDING ITS MEANING AND PRACTICE

A. DeLaTorre, *Institute on Aging, Portland State University, Portland, Oregon*

Empirical data focusing on the planning and development of affordable housing that is considered to be sustainable for older adults are limited. Although myriad studies have focused on housing for older adults, sustainable housing in general, and/or affordable housing for those of all ages and abilities, there is no research that looks at the convergence of these topics, especially the pre-occupancy stages of project planning and development. Additionally, because sustainable, affordable housing for older adults is rare—only six developments in Portland, Oregon over the past 10 years met the criteria—examining how and why this type of development came about and whether it has applicability beyond the Portland region will contribute to knowledge, and hopefully, facilitate future development. The research project—a doctoral dissertation—was a qualitative case study of housing for those aged 55 and older that is considered to be sustainable and affordable. Key informant interviews, focus groups, and policy analysis were the primary data collection techniques. This presentation focuses on the meaning of sustainable development for older adults according to the professionals who work within the planning, design, development, and construction fields. Additionally, it will focus on the importance of various professional roles involved in the development of housing for an aging society, from initial programming until the point of a building's occupancy. Finally, this presentation will address barriers and opportunities that exist for future developments, including municipal policies, economic conditions, and practices within the real estate development industry.

SESSION 735 (PAPER)

MAXIMIZING CIVIC ENGAGEMENT

THE ROLE OF LOCAL LEADERSHIP AND PARTNERSHIP COUNCILS IN COMMUNITY PLANNING FOR OLDER ADULTS

J. Hinterlong, A.M. Arellano, M. Womack, *College of Social Work, Florida State University, Tallahassee, Florida*

This session will report findings of an exploratory, mixed methods evaluation conducted to assess the structure, development, and functioning of seven voluntary community coalitions focused on the needs and abilities of older adults, called Leadership or Partnership Councils. The study draws upon the input of council leaders and members, documentary evidence, and the perspective of external consultants involved in the creation and implementation of these councils. Established by diverse communities throughout Florida, these Councils involve representatives of health systems, the aging network, the non-profit and business sectors, and older adult self-advocates. Initial member composition and the identification of local leaders are shown to be critical to member recruitment and resource acquisition. Lessons learned for council creation and effective management will be discussed. External technical assistance and a focused role for aging network members are highlighted as important strategies. Emergent sources of conflict and instability are also identified, along with approaches used in their mitigation. The session will highlight key initiatives in community planning, policy development, and project implementation emerging from these councils. Examples include new information sharing between health systems, influences on local and regional funding priorities, community-wide health promotion initiatives, and involvement of state agencies and external funders in council-led efforts. The session concludes

with consideration of how independent councils might further collaborate statewide.

DIVERGENT PATHS FOR AMERICA'S DEPENDENTS — 25 YEARS LATER

J.G. Haaga, *National Institute on Aging, Bethesda, Maryland*

In November 1984, Samuel Preston published, in both popular and scholarly outlets, a very influential address “Children and the Elderly: Divergent Paths for America's Dependents”. He marshalled evidence from a variety of sources showing that, contrary to some theories in economic demography, declining numbers of children had led to a worsening, not improvement, in their average well-being, while a steady increase in the number of elderly had been accompanied by improvement. Preston concluded with speculation about the political economy of generational well-being in a Western democracy. A quarter-century later, on the verge of a sharp increase in the size of the elderly population, following major changes in social policy under both Republican and Democratic administrations, it is time to revisit his conclusions. There is better evidence now on trends in well-being of both age groups (including efforts like Kids Count spurred by the Preston debate), on voting patterns for age-relevant transfer programs, and even cross-national evidence. These will be reviewed to assess whether Preston's 1984 fears of generational warfare or more sanguine views of “Win-Win” collaboration are now warranted.

DEVELOPING A THEORETICAL MODEL FOR VOLUNTEERING BY OLDER ADULTS

F. Tang, E. Choi, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Scholars have accumulated knowledge of the beneficial effects of volunteering on older people; however, previous research employed relatively weak theoretical frameworks to understand the mechanism through which older adults benefit from volunteering engagement. The aims of this paper are (1) to identify which individual and institutional factors are related to volunteer time commitment among older adults; (2) to understand the relationships among individual and institutional factors, volunteer commitment, perceived benefits, and subsequent health; and most importantly, (3) to build the theoretical model to elaborate the mechanism for the salutary effects of volunteerism in the older population. Data were collected through self-administrated questionnaire among 207 older adults from 10 volunteer programs at two points of time. We used Structural Equation Modeling (SEM) to test the hypothesized model. The findings revealed that the subsequent health benefits were not the direct results of volunteer engagement. The amount of benefits that older people perceived from their volunteer engagement was strongly associated with mental health of older volunteers. These psychosocial benefits, including socialization, self-worth, and personal growth, were likely to increase with the intensity of volunteer time commitment, that is, the time devoted to the designated volunteer program in a month. In addition, organizational support, such as on-going support and compensations tended to increase individual volunteer's time commitment. The tested model emphasizes the importance of both organizational support and time commitment to maximize the benefits of volunteer engagement for older adults.

CIVIC ENGAGEMENT OF ELDERS: INFLUENCE OF GENERATIVITY AND GEROTRASCENDENCE THROUGHOUT THE LIFE COURSE

L. Stephenson, *University of Kentucky, Lexington, Kentucky*

A record number of adults are entering older adulthood possessing the capability and desire to be civically engaged. With the current recession-riddled economy, local communities are hard pressed to provide resources and services to meet the needs of economically-challenged residents. The intersection of these two societal issues is the potential spark to ignite a civic renaissance through creative empowerment of older adults' experience and civic commitment to solve community prob-

lems. The purpose of this paper is to investigate the civic engagement process of older adults from a life course perspective to provide a framework for cultivating elders' civic capacity. The qualitative study was designed to identify factors influencing civic engagement through two in-depth interviews and a four-session community-based participatory research project of eight older adult participants. Based upon the findings of this study, this paper presents a model of civic engagement throughout the life course. The model integrates concepts of community connectedness with the influences of generativity and gerotranscendence on the civic engagement of older adults. The model depicts a dynamic interaction throughout the life course that inculcates personal beliefs, which, in turn, promote the desire and commitment to be civically active. Through these findings a pathway of engagement emerges that illustrates the importance of civic engagement nurtured early in life and continually cultivated through older adulthood. The paper seeks to expand the discussion of creative opportunities for community capacity building of older adults' civic engagement via developmental pathways throughout the lifecourse.

SESSION 740 (POSTER)

OLDER WORKERS AND EMPLOYMENT

WORK EXPECTATIONS, REALIZATIONS, AND DEPRESSION IN OLDER WORKERS

W. Gallo¹, T.A. Falba², J.L. Sindelar¹, *1. Epidemiology and Public Health, Yale University, New Haven, Connecticut, 2. Duke University, Durham, North Carolina*

In this study, we explore whether ex ante work expectations, conditional on work force status at age 62, affect depression symptoms at age 62. Our sample includes 4,387 participants of the Health and Retirement Study (HRS). It is composed of workers who were less than 62 years of age at the study baseline, and who had reached age 62 by the study endpoint, enabling comparison of realized work status with earlier expectations. We estimate the impact of expected work status on depressive symptoms using negative binomial regression. Sex-stratified regressions are estimated according to full-time work status at age 62. The outcome variable is a summary measure of depressive symptoms based on a short form of the Center for Epidemiologic Studies-Depression scale. The explanatory variable of interest is the subjective probability of working full-time at the age of 62, reported by participants at the 1992 HRS baseline. Confounding variables are controlled. Among participants who were not working full time at age 62, we find that men who provided a higher ex ante likelihood of full-time employment at 62 had significantly worse depressive symptoms than men who provided a lower ex ante likelihood. A similar effect was not found for women. Among participants who were working full time at age 62, we do not find a statistical relationship between ex ante expectations and age-62 depressive symptoms, for either men or women. The results suggest that an earlier-than-anticipated work exit is detrimental to mental health for men nearing normal retirement age.

THE STATES-AS-EMPLOYERS OF CHOICE SURVEY: ASSESSING STATE AGENCIES' LEVEL OF AWARENESS AND RESPONSE TO THE AGING WORKFORCE

M. Brown, *Center on Aging and Work, Boston College, Chestnut Hill, Massachusetts*

In state agencies, where 47% of the workforce is 45 or older, adopting strategies to encourage older workers to work past the traditional retirement age is a critical talent management strategy. While continued workforce participation is one aspect of healthy aging for many older adults, most older workers who want to remain in the workforce state that the typical 8-hour day/5-day workweek is not the employment structure they desire. The States-as-Employers of Choice Survey was conducted in order to assess state agencies' level of awareness and

response to the aging workforce, particularly in terms of offering flexible work options. Findings from the 222 state agencies from the 27 states that participated reveal that agencies that had made the connection between workplace flexibility and overall effectiveness were significantly more likely to report being motivated to offer flexible work options in order to recruit older workers, retain older workers, and increase the job engagement of older workers than agencies that had not made this connection. Additionally, agencies that had made this connection were significantly more likely to provide 'most' or 'all' employees access to a number of flexible work options (such as working an alternative schedule or working a compressed work week) than those agencies that had not yet done so. Offering a variety of flexible work options can be a 'win-win' for agencies concerned about recruiting and retaining workforce talent in light of changing workforce demographics as well as for older workers desiring a more flexible employment structure.

PUBLIC POLICY AND OLDER WORKER LABOR FORCE PARTICIPATION IN JAPAN: LESSONS TO THE UNITED KINGDOM?

M. Higo, *Sociology, Boston College, Chestnut Hill, Massachusetts*

The aging of the workforce projected for the decade ahead has pressured policymakers in most industrialized nations today to seek ways to delay the retirement of older workers. In this paper we discuss the role of public policy in promoting employment of older workers in two different national contexts: Japan and the United Kingdom. Japan today is one of the world's most aged nations and is characterized by substantially higher labor force participation rate among older workers than most other industrialized nations including the UK. This paper discusses three main public policy factors which help explain why workers in Japan remain in the labor force longer than those in the UK: (1) narrower pathways to early retirement; (2) greater employment protections for older employees; and (3) more thorough government active labor market programs designed to assist older job seekers. Quality of working lives of Japanese older workers is by no means better than that of the UK. Nonetheless, we conclude that, for the purpose of increasing the number of older workers in the labor force, it makes sense for policymakers of the UK to closely examine some of the mechanisms and effectiveness of active labor market programs for older job seekers in Japan.

HOW ARE OLDER GED STUDENTS DIFFERENT FROM THEIR YOUNGER COUNTERPARTS?

K. Chee, C. Mathis, *Sociology, Texas State University-San Marcos, San Marcos, Texas*

GED students typically come from disadvantaged backgrounds, which prevent them from graduating from high school on time. Older GED students, in particular, have life circumstances that kept them from pursuing and obtaining GED certificates over a longer period of time. Little is known about this group of individuals who have most likely been subject to cumulative disadvantages over the life course. This study attempts to understand the educational trajectories of older GED students and how they may differ from those of their younger counterparts. Survey data used for this analysis were collected from 88 student participants recruited from 16 GED classes in 10 Central Texas counties. Among the participants, 72 percent were women, and 76 percent were Hispanic. In addition, 17 students were older than 45 years of age (with the oldest being 71 years old), while the remaining 71 students were between 18 and 44 years old. The results of t-tests revealed many similarities and some significant differences between the two groups. Older students were less likely to report that they did well in science while in school, more likely to be motivated to attend GED classes in order to improve their reading skills, and less likely to be interested in preparing for college entrance. They were also more likely to consider their GED classes as their second families. Adult education professionals

may benefit from an improved understanding of the unique learning experiences shared by older learners who did not earn their high school diplomas when they were younger.

SESSION 745 (SYMPOSIUM)

PROMOTING PREVENTION FOR ADULTS 50 TO 64 - CLINICAL AND COMMUNITY PARTNERSHIPS

Chair: *L. Anderson, CDC, Atlanta, Georgia*

In the health reform dialogue, health care and health systems are at the center of most discussions. This session puts prevention at the heart of the debate. It builds on the Centers for Disease Control and Prevention (CDC), American Medical Association (AMA), and AARP's recently released report focusing on building clinical and community partnership addressing clinical preventive services for adults aged 50 to 64. This debate and dialogue session emphasizes the importance of using community as a platform for increasing access to and use of clinical preventive services, building bridges between clinical and community settings, and health reform. Opportunities for researchers, health care providers, and public health and aging practitioners will be highlighted. Panelists will address challenges and potential roles for stakeholders to collaborate in the delivery of clinical preventive services and address health reform that promotes community-wide improvements in prevention.

SESSION 750 (SYMPOSIUM)

PUBLICLY REPORTED NURSING HOME QUALITY MEASURES: GOALS, CHALLENGES AND THE TRANSITION TO THE MDS 3.0

Chair: *E.G. Walsh, Aging, Disability and LTC, RTI International, Waltham, Massachusetts*

Discussant: *V. Mor, Brown University, Providence, Rhode Island*

This symposium provides an overview of the publicly reported nursing home quality measures and the process of revising those measures for review by the National Quality Forum in light of the transition to the MDS 3.0. CMS currently posts information on the worldwide web reporting on 19 different aspects of nursing home quality for each nursing facility. These measures are derived from analysis of the Minimum Data Set (MDS) 2.0, so the transition to the MDS 3.0 requires identifying how and if each quality measure can be recreated using the MDS 3.0 and an opportunity to reconsider the importance and scientific merit of each existing measure. The first paper provides the context describing the government's goals and uses of these quality measures including how it fits with other nursing home quality-related activities like the survey and certification process, the 5-Star Rating system, and nursing facility pay for performance. The second paper provides details regarding the current measures and changes under consideration in the transition to the MDS 3.0 overall and describes several measures in detail. The third paper focuses on the clinical perspective and need for measures to be based on valid assessment items. The fourth paper provides a consumer perspective. Finally, we will present information about the National Quality Forum endorsement process for publicly reported quality measures and the NQF goal of developing harmonized measures that can be used across clinical settings.

NURSING HOME QUALITY MEASURES AS A STRATEGY FOR QUALITY ASSURANCE AND IMPROVEMENT

J. Wiener, R. Constantine, E.G. Walsh, *RTI International, Washington, District of Columbia*

An increasingly common strategy for quality assurance and improvement is to provide consumers, providers, regulators, and payers with information about the quality of care provided by individual providers. The premise is that publicly reported quality measures will make the

competitive market work better and motivate providers to improve performance. As part of this strategy, the Centers for Medicare & Medicaid Services (CMS) posts information on its Nursing Home Compare website on 19 nursing home quality measures which are based on the Minimum Data Set (MDS) 2.0. CMS has recently expanded use of these measures by including them in their nursing home pay-for-performance demonstration and by developing a 5-Star Nursing Home Quality Measure, a consumer-friendly composite measure of quality that uses survey and certification and MDS-derived quality measures. The transition from MDS 2.0 to 3.0 provides an opportunity to assess these measures and to refine them.

ASSESSING THE NURSING HOME QUALITY MEASURES FOR IMPORTANCE, SCIENTIFIC MERIT, USABILITY, AND FEASIBILITY

E.G. Walsh, R. Constantine, J. Wiener, A.M. Greene, M. Freiman, D. Brown, N. West, *Aging, Disability and LTC, RTI International, Waltham, Massachusetts*

Quality measures endorsed by the National Quality Forum (NQF) are subject to periodic review, evaluating their continued importance and analyses of their scientific merit, usability and feasibility. In preparation for seeking NQF endorsement of measures based on the MDS 3.0 in January 2010, we reviewed analyses of the MDS 2.0-based measures and of the MDS 3.0 field tests, convened a technical expert panel and consulted with other experts to identify which measures should be retained, revised, replaced or retired. We will report on our overall assessment for the 19 nursing home quality measures, and provide detailed discussion of several specific measures that reflect changes in the underlying assessment items in the MDS 3.0 (e.g., percent of residents with evidence of depression) or revisions to improve the salience and performance of the quality measure (e.g., decreased locomotion).

CONSTRUCTING MEANINGFUL QUALITY MEASURES

D. Saliba, 1. *UCLA/Jewish Homes Borun Center for Gerontological Research, Los Angeles, California*, 2. *Greater Los Angeles VA GRECC and Center of Excellence, Los Angeles, California*, 3. *RAND Corporation, Santa Monica, California*

For quality measures to be useful, they need to be based on valid and reliable data, and focus on important clinical issues within the control of the provider. The development of the MDS 3.0 provided an opportunity to improve the accuracy of many quality indicators and quality measures by improving the clinical assessments used to calculate these measures, including new approaches to assessing depression, impaired cognition, delirium and pain. We will discuss the results of validity testing of these clinical assessment instruments which showed MDS 3.0 items had either excellent or very good reliability even when comparing research nurse to facility-nurse assessment, how these assessments in turn serve as building blocks for meaningful quality measure development, and other clinical considerations in the selection and specification of appropriate nursing home quality measures.

SESSION 755 (SYMPOSIUM)

SERVICE PROVISION TO OLDER ADULTS LIVING WITH HIV/AIDS: BARRIERS AND OPPORTUNITIES

Chair: C.A. Emlet, *University of Washington, Tacoma, Tacoma, WA*
Discussant: L. Linley, *Centers for Disease Control and Prevention, Atlanta, Georgia*

Between 2004 and 2007, the estimated number of persons 50 years and older living with HIV/AIDS increased from 105,855 to 156,511 (CDC, 2009). Gerontological providers are increasingly likely to encounter this population. But are providers knowledgeable and capable of providing sensitive care? This symposium will examine issues related to knowledge and preparedness of gerontological providers to serve HIV infected older adults. The first paper reports on a national

random sample of gerontological social workers, gerontological nurses and geriatricians (N=486) capturing their knowledge and attitudes toward HIV in older people. Findings indicate that enhanced education of providers is necessary to ensure adequate clinical care. The second paper reports on a survey of all 13 Area Agencies on Aging in Washington State related to their experience in serving older HIV+ clients and perceived preparedness. Over half (61.5%) identified the need for increased staff training in HIV/AIDS among older adults. The third paper reports on a systematic review of gerontological journals between 1993 and 2008 related to the overall efficacy of HIV behavioral interventions designed to reduce HIV risk among older adults. Utilizing a comprehensive search of electronic bibliographic databases and hand searches, the study found only ten interventions met the criteria for best evidence using CDC criteria in that period of time. The fourth paper addresses the risk and protective factors related to traditional Latino gender roles, family values, religion, socioeconomic factors and health, providing recommendations for the development of culturally competent practices with older Latinas relative to HIV disease by gerontological providers.

KNOWLEDGE AND ATTITUDES OF GERONTOLOGICAL HEALTH PROVIDERS TOWARD HIV AND AIDS

A.K. Hughes, *Michigan State University, East Lansing, Michigan*

Incidence of HIV is increasing in adults over age 50. How well prepared are providers who specialize in gerontology/geriatrics? This study was undertaken to assess provider knowledge and attitudes toward HIV/AIDS. Sixty-five percent (N=486) of a national random sample of social workers who specialize in aging, gerontological nurses, and geriatricians responded to the survey instrument. Provider groups differed significantly on general knowledge of HIV, as measured by the HIV KQ-45 ($F(2, 483) = 18.63, p < .0005$), with physicians scoring highest of all provider groups. Attitudes were found to be positive, with low scores on avoidance and high scores on empathy. Significant differences were only found between nurses and social workers ($F(2, 952) = 6.84, p < .0005$), however this difference is unlikely to be practically significant. Knowledge of issues specific to older adults and HIV were less well known, indicating that education of providers is necessary to ensure adequate clinical care.

SERVING OLDER ADULTS WITH HIV DISEASE: RESPONSES FROM THE AGING NETWORK IN WASHINGTON STATE

C.A. Emlet, *University of Washington, Tacoma, Tacoma, WA*

As the numbers of older adults with HIV/AIDS grow, the aging network will increasingly be called upon to provide community based services. This paper reports on the results of a survey administered to the thirteen Area Agencies on Aging (AAA) in Washington State regarding their views of serving older, HIV positive adults and their preparedness to do so. The response rate from the AAAs was 100%. The majority of AAAs (84.6%) agreed or strongly agreed that serving this population was consistent with their mission. The proportion of HIV positive adults served was small, ranging from 0-5% ($M = 1.1, SD = 1.84$). The majority (86%) of agencies felt that written educational materials for staff and clients would be needed, while over half (61.5%) identified the need for increased staff training in HIV/AIDS among older adults. Plans are underway to create training opportunities regarding older adults and HIV/AIDS for AAA staff.

A SYSTEMATIC REVIEW OF THE EFFICACY OF HIV PREVENTION EDUCATION PROGRAMS FOR OLDER ADULTS IN THE UNITED STATES

N. Orel, *Gerontology, Bowling Green State University, Bowling Green, Ohio*

This systematic review examined the overall efficacy of HIV behavioral interventions designed to reduce HIV risk behaviors among older adults residing in the U.S. A cumulative database of HIV/AIDS behav-

ioral prevention literature focusing on older adults was developed using automated and manual search strategies. This included a comprehensive search of electronic bibliographic databases and hand searches of key Gerontological journals from 1993 to 2008. Additionally, contacts were made with researchers and/or aging service providers to obtain information on unpublished HIV/AIDS prevention programs for older adults. Standard systematic review methods were used to identify interventions demonstrating best evidence of efficacy in reducing HIV risk among older adults. Eligible studies were reviewed on the basis of the CDC's Prevention Research Synthesis Team efficacy criteria (i.e., study design, implementation/analysis, and strength of evidence). The results of this review indicated that ten interventions met the criteria for best evidence; however, important gaps still exist.

HIV/AIDS AND OLDER LATINAS: CULTURAL, GENDER AND GENERATIONAL CONSIDERATIONS

R.L. Beaulaurier, *School of Social Work, Florida International University, Miami, Florida*

Older Latina women are one of the fastest growing groups of new AIDS cases. Twenty percent of all women ever diagnosed with the disease are Latina and 5.5% of Latinas infected with the virus are older. Most older Latina women acquire HIV/AIDS through sexual contact. Yet, older Latina women are one of the least studied American demographic groups with regard to social, health, or sexual behavior. This could leave geriatricians unprepared for dealing with HIV/AIDS in this population. This [paper?] will address risk and protective factors related to traditional Latino gender roles, family values, religion, socioeconomic factors, health, and health care, with special attention to the /triple jeopardy /faced by this population by virtue of being female, seniors, and minorities. The author will make recommendations for the development of culturally competent practices with older Latinas and the development of a research agenda to better understand their risk-related and health-seeking behavior.

SESSION 760 (PAPER)

SOCIAL ISSUES IN PRIMARY CARE

EVALUATING VA HOME-BASED PRIMARY CARE: QUALITY DOMAINS, RESEARCH PRIORITIES, OUTCOMES, AND METHODOLOGICAL CHALLENGES

T. Olsan¹, P. Katz^{2,3}, J. Karuza², N. Swanson³, *1. University of Rochester School of Nursing, Rochester, New York, 2. University of Rochester School of Medicine, Rochester, New York, 3. Canandaigua VA Medical Center, Canandaigua, New York*

As the setting for delivering long-term care to chronically ill disabled older adults increasingly shifts from institutions to the home setting, effective models of home-based primary care will be needed for planning and evaluating home services. Although the Veterans Affairs Home-Based Primary Care (VA HBPC) program is an exemplary model that could be more widely adopted, the scarcity of program evaluative research limits its potential for dissemination. Our study addresses this gap by establishing a research agenda to build an evidence base demonstrating how well the 131 VA HBPC programs and satellites nationwide deliver and improve care for veterans and their informal caregivers. A descriptive two-stage consensus building study was conducted. In the first stage, focus groups with professionals (n=25) and interviews with veterans (n=6) and caregivers (n=4) elicited detailed information about how the VA HBPC works and the structures, processes, and patterns linked to quality. In the second stage, data displays and research priorities from the first stage were submitted to a four-round Delphi process with national experts in geriatrics and health services research (n=11). Experts enriched the data set by reacting to first stage findings and by adding other insights about how to define and measure VA HBPC quality. The resultant research agenda is described in this presentation, specifically,

the quality domains, research priorities, and outcomes relevant to the provision of primary geriatric care in the home. Recommendations for addressing the methodological challenges of multisite research with variations among individual programs will also be discussed.

SOCIAL WORK IN PRIMARY CARE: A PATIENT CENTERED INTERVENTION IMPROVING FUNCTIONING AND SATISFACTION WITH CARE

B. Keefe¹, S. Enguidanos², S.M. Geron¹, *1. Boston University School of Social Work, Boston, Massachusetts, 2. Davis School of Gerontology, University of Southern California, Los Angeles, California*

With growing awareness of the interrelatedness of medical and health issues with psychological, social, economical, behavioral, and environmental factors, research testing interventions using social workers in primary care are needed. Results of a randomized study using a Problem-Solving Therapy approach with older, frail primary care patients was found to improve satisfaction and physical functioning among intervention patients. From October 2004 to October 2006, 321 participants were enrolled in the study, 160 assigned to the intervention and 161 assigned to usual care. Among those in the intervention, 107 engaged in problem solving therapy, with a total of 568 problems identified, averaging 3.6 (SD=2) per patient. The vast majority (92%) of problems were identified by the patient, with 6% introduced by the social worker and 2% by the physician. Analysis of problems revealed that the most frequently patient identified problems included (1) eliciting information regarding diseases and self-management (16.2%), (2) engaging in exercise or weight loss activities (13%), (3) house and yard cleaning (9%), and (4) issues surrounding transportation (7.2%). Patients were significantly more likely to solve problems they identified as compared to problems identified by the primary care physician or social worker. Additionally, patients were more likely to solve problem that focused on This session will examine the relationship between problems solved and patient outcomes such as depression, functioning, problem-solving skills, and quality of life. Implications of a social work intervention utilizing a patient centered approach will be discussed.

TEACHING MSW STUDENTS TO CONDUCT CULTURALLY COMPETENT EVIDENCE-BASED TREATMENT FOR OLDER LATINOS IN PRIMARY CARE: INTEGRATION OF RESEARCH AND PRACTICE

L.M. Quijano^{1,2}, R. Marrujo², *1. Social Work, Colorado State University, Fort Collins, Colorado, 2. North Range Behavioral Health, Greeley, Colorado*

To bridge the gap between aging and mental health, social work students must be skilled in the provision of evidence-based treatments for common mental health disorders among older adults, culturally competent care, services within interdisciplinary settings. The purpose of this paper presentation is twofold: 1) To discuss a model for teaching MSW students to screen, assess and provide a culturally adapted cognitive-behavior treatment (CBT) intervention for older Latino primary care patients with generalized anxiety disorder (GAD) as part of a randomized controlled clinical trial; and 2) To present preliminary results and lessons learned in the implementation of the study. Estimates indicate that Latinos age 65 and above will become the largest ethnic minority group by 2028, comprising 16% of the older adult population. One major concern for this growing population is the lack of available evidence-based and culturally relevant mental health treatment, particularly for anxiety disorders. Generalized anxiety disorder (GAD), one of the most frequent anxiety disorders in later life, is a pervasive and chronic disorder that interferes with life function and significantly decreases quality of life. To approach treatment, this project uses CBT to treat elderly Latinos with GAD. The decision to use CBT as opposed to alternative psychotherapeutic methods was based on a large body of literature supporting the utility of CBT for anxiety disorders across diagnostic categories, patient subgroups, and treatment settings. Social workers

based in primary care provide an effective and efficient means of delivering services where older Latinos prefer to receive mental health care.

TESTING THE CAPACITY FOR CULTURAL CHANGE IN IRISH PRIMARY CARE

L.E. Carragher, F. Markey, D. Getty, R. Bond, *DKIT, Dundalk, Ireland*

Introduction The Irish Primary Care Strategy - A New Direction (2001) promotes the idea of a team-based approach to achieve better co-ordination and integration of services through the creation of multi-disciplinary primary care teams. This objective is still in its infancy, with entrenched cultural differences linked to professional boundaries continuing to present challenges. Given the dominance of the medical model in shaping approaches to care in Ireland, this doctoral study is concerned with the capacity for culture change in Irish primary care. It examines the values, attitudes, beliefs and artefacts of a multi-disciplinary home support team delivering care to community dwelling older people. In integrating theories of organisational culture, Schein's (1992) model of organisational culture is employed as a theoretical fulcrum. **Methodology** A phenomenological, comparative methodology is employed, involving in-depth interviews with team members as well as older people who are the recipients of home care. Focus groups with home care workers and observations of team working are also employed. **Results** Preliminary analysis suggests that intervention team culture has a high level of carer empowerment and client centredness with good levels of professional communications and no obvious power hierarchy. In contrast, carers working within the standard home support system feel undervalued and disempowered. **Discussion** As a large organisation, the Health Service Executive has embedded culture and subcultures particularly in ideas and beliefs surrounding authority, deference, status, discipline and blame. This research will make an important contribution to the literature on the 'de-medicalisation' of integrated care perspectives.

SESSION 765 (SYMPOSIUM)

TOWARD A SURVIVORSHIP MODEL: RESILIENCE AND FORGIVENESS AMONG HOLOCAUST SURVIVORS

Chair: *R.R. Greene, Social Work, University of Texas-Austin, Austin, Texas*

Discussant: *N.P. Kropf, Georgia State University, Atlanta, Georgia*

Most Holocaust survivors have now reached a time when they review their lives, attempt to resolve old conflicts, and find new meaning in life events. How have these survivors of earlier unprecedented separation and loss experienced the sometimes challenging transitions of the final stage of life? Have they relived trauma of the Holocaust or have they exhibited resilience—the capacity to bounce back despite the exposure to severe risks. The panel will discuss the results of a research study on Forgiveness, Resilience, and Survivorship funded by the Templeton Foundation among 133 Holocaust Survivors in nine U.S. locations. The snowball sample of older adults, who were considered cognitively aware, completed structured, recorded interviews. Interviews were analyzed to learn (a) how relatively forgiving study participants are, (b) how resilient they said they are (as it relates to being a Holocaust survivor), (c) how successfully they perceive they have accomplished Erikson's eight stages of life, (d) how these factors are interrelated, and (e) how survivors' Holocaust experiences affected subsequent life events and prepared them for old age. Theoretical frameworks were used to describe critical events in survivors' lives before, during, and after the Holocaust. Symposium members will present the components of a survivorship model involving the ability to survive and recover from severe adverse events or traumas. They will discuss actions and beliefs that enhanced the survival of individuals, families, and communities, allowing them to deal with feelings of distress, and then begin to heal. Implications for mental health practice are discussed with attendees.

MEANING-MAKING IN SURVIVORSHIP: APPLICATION TO HOLOCAUST SURVIVORS

M.P. Armour, *University of Texas-Austin, Austin, Texas*

Although meaning-making is fast emerging as a core construct in considering trauma and violent loss, research shows that trauma survivors have difficulty finding meaning when meaning-making processes are defined as sense-making or benefit finding. This study applies an emerging, noncognitive meaning-making process, meaning-making grounded in action, to the lifetime experiences of older Holocaust survivors. Findings indicate that survival was the core theme at 3 different time points. During the Holocaust, survival meant keeping hope alive and keeping self alive. After the Holocaust, survival meant reconstructing and regaining what was lost and cultivating proactive attitudes. Now, during the later years, survival means maintaining health, fulfilling obligations and moral imperatives, and building strength from protests and self-pride. Implications for other groups who have experienced mass trauma are discussed, as is the contribution of the findings to meaning-making theory. Funded by Templeton Foundation

CREATIVE EXPRESSIONS AND RESILIENCE AMONG HOLOCAUST SURVIVORS

C. Corley, *California State University, Los Angeles, California*

Positive psychologists and gerontologists are increasingly interested in the benefits of artistic experience and how it may contribute to resilience across the life course. This article presents vignettes of three visual artists who survived the Holocaust in Hungary and now live in the Los Angeles area. It discusses the intersection between their creativity and resilience, and how these creative expressions enhanced personal and community well-being. Implications for research on the use of images are discussed, along with possible innovations in social work practice and education. Funded by the Templeton Foundation.

RESILIENCE IN AGING: HOLOCAUST SURVIVORS SIXTY YEARS LATER

S.A. Graham, *University of Texas-Austin, Austin, Texas*

This study examined the lives of one hundred thirty-three Holocaust survivors in nine locations in the United States to gain insight into survivorship and resilience. Using a framework constructed by Lewis and Harrell (2002), resiliency in older adults can be evidenced in 1) Affiliation, 2) Safety and Support, and 3) Altruism. Analyses of selected questions and quotes focusing on aging and later life experiences, describes the Holocaust survivors as those with high levels of civic engagement, and community and familial support; strong commitment to maintaining physical activity and well-being; and on-going philanthropy and volunteerism. Findings support the literature that suggests that Holocaust survivors are aging resiliently. Research findings are expected to enhance the work of mental health practitioners and inform our understanding of factors and behaviors that contribute to resilience in aging. Funded by the John Templeton Foundation

MEMORY AND RESILIENCY

H. Cohen, *Texas Christian University, Fort Worth, Texas*

This paper examines the memories of 40 older Holocaust survivors who participated in a larger mixed method national study on survivorship sponsored by the Templeton Foundation. Data collected from open-ended questions about memory was analyzed. Autobiographical remembrances provide information involving loss, powerlessness, survival, and resiliency. Information is also gathered about the importance of survivors' families, how they transmitted values, educated the next generation, and contributed to the community. Their memories teach us how survivors can sum up their lives and come to satisfactory resolution of the tension between integrity and despair, despite negative experiences.

EXPLORING GENDER DIFFERENCES IN SURVIVORSHIP

C. Morano, *Hunter College, New York, New York*

This paper presents findings from the study Forgiveness, Resiliency, and Survivorship Among Holocaust Survivors, sponsored by a Templeton Foundation grant. A mixed methods approach was used to assess if the gender of the survivor accounted for differences in the perception of survivors successful completion of Erickson's Eight Stages of Development (8-items) or in their perception of how survivors adapted (16-items) following World War II (Danieli; 1995). Although the quantitative data suggest that gender did not account for significant differences in successful completion of Erickson's Eight Stages; or in the majority of items in the Danieli Typology, the qualitative analyses of 34 randomly selected transcripts (17 male and 17 female) suggest that coping mechanisms used to complete Erickson's Eight Stages and their adjustment following WWII, did vary by gender. Examples from transcripts of the interviews will be used to illustrate these differences.

EXPERIENCE AND CREATIVE EXPRESSION AMONG RESILIENT HOLOCAUST SURVIVORS

O. Macklin¹, C. Corley^{2,3,4}, 1. *California State University Los Angeles, School of Social Work, Los Angeles, California*, 2. *Professor, School of Social Work, California State University, Los Angeles, Los Angeles, California*, 3. *Doctoral Faculty, Fielding Graduate University, Los Angeles, California*, 4. *Associate Director, Applied Gerontology Institute, Lifelong Learning, CSULA, Los Angeles, California*

Growing interest in resilience across the life course pertaining to creative expression among the older adult population has prompted research. Although the two domains seem to be related, there has been insufficient evidence to date that artistry among older adults impacts the ability to survive life challenges. Transcript data from 133 U.S. Holocaust survivors revealed a number of older adult survivors engage in creative outlets. Follow-up interviews with selected survivors reveal that creative endeavors continue well into the later years and that sharing their artistry with others in life-enhancing ways is conducive to overall well-being. Visual art by three Holocaust survivors is presented along with an analysis of the experiences, shared creative expression, and the bearing that each has had on interpreting life's meaning. Findings are assisting social science practitioners in designing community-based programs identifying and inspiring artistic expression for resilience-enhancement in older adults.

SESSION 770 (POSTER)

BS POSTER SESSION II - FACE-TO-FACE TIME: 1:00 PM – 2:30 PM

THE METABOLIC SYNDROME AND THE ONSET AND PERSISTENCE OF DEPRESSIVE SYMPTOMS IN LATER LIFE

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Introduction: Several studies report a cross-sectional association between metabolic syndrome and depressive symptoms. The longitudinal effect of metabolic syndrome on depression in later life is still unclear. **Methods:** Using data from 778 participants, aged ≥ 65 years, of the InChianti Study, we examined whether metabolic syndrome was associated with onset and persistence of depressive symptoms during 6 years of follow-up. Metabolic syndrome was assessed at baseline and defined as three or more of the following: abdominal obesity, high triglycerides, low HDL cholesterol, high blood pressure, and high fasting glucose. Depressive symptoms were assessed using the CES-D scale at baseline and after 3 and 6 years of follow-up. **Results:** At baseline

195 persons had metabolic syndrome, and 161 were depressed (CES-D ≥ 20). Among non-depressed persons, 26.1% developed depressive symptoms during follow-up; among depressed persons, 76.4% showed persistence/recurrence of depressive symptoms. Metabolic syndrome was associated with a more than 3-fold increased likelihood of persistence of depressive symptoms after adjustment for sociodemographics (OR=3.18, 95%CI=1.10-9.21), which decreased somewhat after adjustment for lifestyle and health factors (OR=2.58, 95%CI=0.86-7.77). Especially low HDL cholesterol levels predicted persistence of depressive symptoms (adjusted OR per SD increase=0.62, 95%CI=0.40-0.98). There was no association between metabolic syndrome and onset of depressive symptoms, but large waist circumference did increase the odds of onset of depressive symptoms during follow-up (adjusted OR per SD increase=1.30, 95%CI=1.06-1.59). **Discussion:** In late life, metabolic syndrome did not predict onset of depressive symptoms, but did predict persistence of symptoms among depressed persons. The latter may suggest that depression with cardiovascular abnormalities ('vascular depression') identifies a chronic subtype of depression.

DYNAMIC DETERMINANTS OF EXCEPTIONAL HEALTH AND LONGEVITY

A.I. Yashin, K.G. Arbeev, I. Akushevich, S.V. Ukraintseva, A. Kulminski, L. Arbeeva, I. Culminskaya, *Sociology, Duke University, Durham, North Carolina*

The fact that deviations of physiological indices from their normal values contribute to an increase in morbidity and mortality risks is well known. It is, however, unclear which dynamic characteristics of these indices can also play a significant role in such risks. In this paper we use longitudinal Framingham Heart Study data on body mass index, diastolic blood pressure, pulse pressure, pulse rate, level of blood glucose, hematocrit, and serum cholesterol to address this question. We found that different indices have different average age patterns, and may be characterized by different values of parameters describing their dynamic properties. We found that individual rates of change in physiological indices, as well as different measures of their individual variability manifested during the life course are important contributors to respective risks. We also found that for indices with non-monotonic average age trajectories the maximum values of respective indices, the ages when these values have been reached, as well as the values of the rates of decline in such indices after reaching a maximum value are important risk factors. The dependence between such risk factors is investigated. The values of dynamic characteristics corresponding to exceptional health and longevity are evaluated. The biological mechanisms which might contribute to exceptional health and longevity are discussed.

IL-6 MEDIATES AGE ASSOCIATED OVER-PRODUCTION OF IL-6 IN THE ADIPOSE TISSUE

M.E. Starr, B.M. Evers, H. Saito, *Biochemistry and Molecular Biology, University of Texas Medical Branch, Galveston, Texas*

Age-associated over-production of interleukin-6 (IL-6) during systemic inflammation is a well documented phenomenon and closely linked to increased mortality in the aged. We recently found that white adipose tissue is the major source of IL-6 production in a murine model of endotoxin (LPS)-induced systemic inflammation. In the present study, an in vitro organ culture system was applied to examine IL-6 expression in the white adipose tissues from young and aged mice. We found that LPS treatment induced levels of IL-6 production in the adipose tissues that were higher in aged than young mice. We also examined the effects of the two major early cytokines, TNF α and IL-1 β , and found that IL-6 production was induced by treatment with IL-1 β , but not TNF α . In addition, the LPS-mediated production of IL-6 was effectively lowered by treatment with neutralizing antibodies against IL-1 β in adipose tissues from aged mice only. Finally, we found that after intraperitoneal injection of mice with LPS, IL-1 β was strongly expressed in the lungs

and spleen with the level of expression being higher in the aged. IL-1 β was also expressed to a lesser extent in other organs including the adipose tissue. These findings suggest that, IL-6 over-production in the adipose tissue is mediated by IL-1 β produced in the adipose tissue itself and by circulating IL-1 β produced in other tissues. These processes are augmented in the aged and may partly explain their increased susceptibility to systemic inflammation.

NEUROCOGNITIVE IMPAIRMENT IN HIV INFECTED NAIVE PATIENTS : THE ROLE OF GENETIC POLYMORPHISMS, VIRAL CHANGES AND INTRATHECAL IMMUNE ACTIVATION

G. Annoni¹, M. Gregorio¹, A. Bandera², B. Tagliabue¹, E. Suardi², A. Gori², *1. Internal Medicine, Università Milano-Bicocca, Monza, Italy, 2. Division of Infectious Diseases, Department of Internal Medicine, San Gerardo Hospital, Monza, University of Milan-Bicocca, Monza, Italy*

Background. HIV penetrates central nervous system (CNS) early during primary infection, leading to HIV-associated neurocognitive disorders (HANDs), sustained by the HIV replication in CNS and immune activation. We correlated the change in CNS viral replication and intrathecal immune activation in naïve HIV patients with the genetic polymorphisms of immune activation markers and the neurocognitive performance obtained by an extensive evaluation pre and 6 months after combination antiretroviral therapy (cART). **Methods.** 18 patients (mean age = 42.4 years old) with CD4<200/ μ l starting cART were considered; at baseline and after 3 months were measured on plasma and cerebrospinal fluid (CSF) HIV-RNA, IL-6, IL-10, TNF- α , TGF- β 1, TGF- β 2, INF- γ , MCP-1 and MIP-1 α . Single nucleotide polymorphisms (SNPs) in genes of TNF- α , TGF- β 1, IL-10, IL-6 and INF- γ were assessed by SSP-PCR methodology. **Results.** At T0 HANDs was diagnosed in 6 patients. There were no significant differences in CSF HIV RNA levels between patients with normal and impaired tests at T0. Among cytokines we found higher levels of CSF IL6 in patients with HANDs. None of patients without HANDs develop cognitive impairment after 6 months. In patients with HANDs the frequency of IL-10-1082A allele, linked with a higher risk of Alzheimer disease, was higher (12.5%) than in those without HANDs. **Conclusions.** In this set of patients the neurocognitive impairment of HANDs doesn't seem to be associated with CSF HIV RNA levels, but with a proinflammatory pattern i.e. increased levels of IL-6 in CSF and the SNPs 1082A allele of IL-10.

NARROWING DOWN THE CONGENIC REGION THAT BEARING THE GENE IN B6C3H

Q. Meng, R. Yuan, *The Jackson Laboratory, Bar Harbor, Maine*

IGF-1 signaling pathway plays a key role in regulating biological processes of aging and longevity. Mutants with depressed IGF1 signaling show significantly extended longevity. However, genetic variations existing in normal population that might regulate IGF-1 and aging have yet been illuminated. Previous studies identified a quantitative trait loci (QTL) for IGF-1 is located on Chromosome 10: 78~110 Mb and generated a congenic strain B6.C3H-Igf1, which contains C3H alleles on Chromosome 10: 65.9~ 90.4Mb on the B6 background. This congenic strain has 17% higher ($p<0.05$) IGF-1 than B6, suggesting the polymorphisms in the congenic region are involved in regulating IGF-1 levels. Besides the physiologically elevated IGF-1, such polymorphism widely affects other aging related phenotypes including fat percentage, levels of glucose, insulin and leptin, and metabolic rate when compared to B6. These results implicate that genes in this congenic region may have important impact on biological processes of aging. However, there are more than 380 genes located within this 24.5Mb region (<http://www.ensembl.org/>), which might all account for the IGF-1 differences and phenotype variations. To identify the QTL gene(s), we backcross (B6.C3H-Igf1 x B6) F1 with B6, and genotype the offspring with single-nucleotide-polymorphism (SNP) markers and microsatellite (MIT) markers to select the desired recombination. So far, we have

significantly narrowed the congenic region to about 3.1Mb (87.0-90.1Mb), which contains 39 genes including Igf1. Studies of evaluating IGF-1 levels and aging related phenotypes of this congenic strain are on-going and will be ready to report at the meeting.

IMPAIRED ABILITY TO REMAIN UPRIGHT IS ASSOCIATED WITH REDUCED SKELETAL MUSCLE SRF IN OLD MICE

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Objective: Background: Aging changes in skeletal muscle include impaired mechanical performance and reduced muscle mass. A number of muscle genes in the skeletal muscle are controlled by SRF. It is possible that changes in skeletal muscle during aging might be associated with altered levels of SRF. **Method:** Functional status in young adult and aged mice was determined by the ability to grasp food pellets on the overhead cage grill in individually housed mice. Observations were made on the mice at fixed times in the morning and afternoon by 2 independent observers, blinded to the age of the mice. In another set of experiments a stop-watch was used to measure the duration of sustained upright posture (in seconds) on hind-limbs while nibbling on the overhead food pellets. The study period was 2 weeks, with 20 observations per mice. Western blot analysis was performed on the skeletal muscle of these mice. **Results:** The average number of attempts needed to successfully grasp food pellets (from the over-head cage grill) was 1.2 ± 0.1 for the normal young adult and 4.0 ± 1.1 for the old mice ($p<0.05$). The young adult mice remained upright for 13.6 ± 1 seconds vs 5.1 ± 2 seconds in old mice ($p<0.05$). On Western blotting, aged skeletal muscle had a 3 fold reduced SRF level vs. that in young skeletal muscle ($p<0.05$). **Conclusions:** Senescence is associated with an impaired ability to maintain upright posture and skeletal muscle weakness. These changes may be due to reduced SRF in skeletal muscle.

SYSTEMS BIOLOGY OF AGING—NETWORK MODEL 2009

J.D. Furber¹, P. Langley^{2,3}, *1. Legendary Pharmaceuticals, Gainesville, Florida, 2. School of Computing & Informatics, Arizona State University, Tempe, Arizona, 3. Institute for the Study of Learning and Expertise, Palo Alto, California*

The many observable signs of human senescence have been hypothesized by various researchers to result from several primary causes. Close inspection of the biochemical and physiological pathways associated with age-related changes and with the hypothesized causes reveals several parallel cascades of events that involve multiple interactions and feedback loops. We present a network diagram to aid in conceptualizing the many processes and interactions among them, including promising intervention points for therapy development. This diagram is maintained on the Web as a reference for researchers and students. Content is updated as new information comes to light. www.LegendaryPharma.com/chartbg.html In addition, we are adapting the network model's contents into an interactive website with links to references and background materials. A symposium to promote this development was held at Arizona State University, December 2008; abstracts are at <http://circas.asu.edu/symposia/aging/> This network model includes both intracellular and extracellular processes. It ranges in scale from the molecular to the whole-body level. Important pathways include: Extracellular proteins become damaged, altering environmental niches for cells. Lysosomes accumulate reactive, crosslinked lipofuscin. Mitochondrial DNA mutates. Lamin-A splice-variant, progerin, accumulates in nucleus. Nuclear envelope pore proteins become oxidized. Nuclear mutations, telomere shortening, chromosome breaks, chromatin alterations and epigenetic DNA adducts change gene expression. Oxidized aggregates in cytoplasm become crosslinked. Inhibited proteasomes reduce turnover of damaged molecules and of expired

ity. Our preliminary findings reveal that attention networks and their interactions are influenced by physical health, and impact on mobility. We will discuss these findings in the context of compensatory aging models.

SESSION 780 (SYMPOSIUM)

THE WILDER SIDE OF AGING: COMPARATIVE PHYSIOLOGY OF LONGEVITY AND LIFE HISTORIES

Chair: *D. Holmes, School of Biological Sciences, Washington State University, Pullman, Washington*

Discussant: *D. Holmes, School of Biological Sciences, Washington State University, Pullman, Washington*

The biology of aging integrates state-of-the art approaches to understanding both “ultimate” (evolutionary, comparative, and population-level) and “proximate” (molecular, cellular and physiological) mechanisms responsible for organismal senescence. This kind of integration is critical for assessing the generality and clinical relevance of specific mechanisms – like cellular resistance to oxidative damage – to aging and related disease processes in animals, including humans. This symposium will feature biologists who use “nontraditional” study animals and natural systems for examining the physiological correlates of aging and life span, ranging from long-lived birds and bats to snakes and field crickets.

WHAT DETERMINES MAXIMUM LIFESPAN? INSIGHTS FROM BIRDS, BEES AND OTHER SPECIES

A.J. Hulbert, *Biological Sciences, University of Wollongong, Wollongong, New South Wales, Australia*

Animals differ dramatically in their maximum lifespan yet we do not fully understand what determines these differences. A mouse can live up to ~4y, and humans ~120y, yet for our size we should only live ~25y. Birds live much longer than similar-sized mammals. Recently, it has been shown that membrane fatty acid composition varies systematically among mammals and birds in a manner correlated with maximum lifespan. Short-living species have membrane fatty acid composition in which peroxidation-susceptible fatty acids dominate while long-living species have membrane bilayers in which peroxidation-resistant fatty acids dominate. A similar difference is observed between (i) long-living queen bees compared to short-living worker bees, and (ii) the offspring of long-living humans compared to the offspring of shorter-living humans. It is proposed that membrane composition is an important determinant of aging and maximum lifespan.

RADIOTRACER, ENZYMOLOGICAL, AND MOLECULAR STUDIES OF LIPID TRADE-OFFS UNDERLYING THE DISPERSAL-REPRODUCTION TRADE-OFF IN A WING-DIMORPHIC INSECT

A.J. Zera, *University of Nebraska, Lincoln, Nebraska*

Dispersal polymorphism is common in insects, involves large-magnitude trade-offs between resources devoted to dispersal capability vs. reproductive effort, and is a useful model to investigate mechanisms underlying life-history trade-offs. In the cricket *Gryllus firmus* the genetic trade-off between triglyceride (flight fuel) accumulation and early age fecundity results from differential allocation of absorbed nutrients, but not differential acquisition of nutrients. Radiotracer studies have documented extensive morph-specific alterations of lipid metabolism such as fatty acid biosynthesis and oxidation, and relative biosynthesis of triglyceride vs. phospholipid. Consistent with expectations of Metabolic Control Analysis, flux differences are caused by correlated changes in specific activities of numerous enzymes of lipid metabolism, which, in turn, appear to be due to altered hormonal control of gene regulation. Advantages and disadvantages of using natural genetic variation vs. laboratory-generated mutations in studies of life history trade-

offs will be discussed. Research supported by NSF IBN-9808249 and IOS-0516973.

PHYSIOLOGICAL EVOLUTION IN NATURAL POPULATIONS OF SNAKES WITH DIVERGENT LIFESPANS, BUT NEGLIGIBLE SENESENCE

A. Bronikowski, K.A. Robert, *Iowa State University, Ames, Iowa*

Reptiles are an underutilized model for studying the biology of senescence; the existence of negligible senescence in many reptile species suggests that their study could provide intriguing insights into the biology of “not aging.” Long-term studies of natural populations of garter snakes combined with laboratory manipulative experiments will be discussed. Specifically, populations of garter snakes (*Thamnophis elegans*) in the Sierran Nevada range are differentiated along a slow/fast pace-of-life continuum. Individuals either: grow slow, reproduce late, and live many years; or they grow fast, reproduce early, and have short lifespan. I present results on the sources of mortality in the wild that have likely moulded their respective life-histories. And I provide detailed results of physiological experiments in the laboratory that reveal that the long-lived phenotype has evolved better resilience to oxidative and other stresses.

SESSION 785 (SYMPOSIUM)

APPROACHES FOR HEALTH PARITY AND ASSESSMENT FOR OLDER PEOPLE WITH INTELLECTUAL DISABILITIES

Chair: *E. Perkins, School of Aging Studies, University of South Florida, Tampa, Florida*

Discussant: *E. Ansello, Virginia Commonwealth University, Richmond, Virginia*

This is the official symposium for the Formal Interest Group on Developmental Disabilities. Increased longevity of adults with intellectual and developmental disabilities (IDD) has resulted in a greater need to determine lifespan access to health care and appropriate assessment of health status. There is concern regarding disparity in health access and status of persons with intellectual disabilities when compared with the general population. This symposium highlights research examining assessment of health and special health care issues of older adults with IDD. Specifically, Hsieh and Yamaki examine the health status and health risks of adults with IDD who reside at home. They also investigate the quality of preventive health care and dental services and report that disparity exists between IDD and non-IDD populations. Robinson, Davidson, Henderson and Janicki have used the Rochester Health Status Survey to estimate health trajectories and health service utilization for older adults with IDD. Though health status changes are similar to the non-IDD population, their data indicates that dental, psychiatric and behavioral health utilization raises important concerns. Finally, Lucchino describes the issues of long term medication usage and the increasingly common occurrence of Adverse Drugs Reactions (ADR's) in older adults with IDD. Each of these presentations highlight that health care issues in older adults with IDD require greater attention in assessing overall health access, promotion of preventative health care, and better health surveillance across the life span in this population.

HEALTH STATUS AND HEALTH CARE ACCESS AMONG ADULTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES LIVING AT HOME

K. Hsieh, K. Yamaki, *Disability and Human Development, University of Illinois at Chicago, Chicago, Illinois*

Background: Access to quality health care for people with developmental disabilities (DD) has been a public health concern since the deinstitutionalization movement. In addition, they are likely to experience poorer health than the general population. This study sought to address

quality of health care by examining: (1) What is the health status and what are the health risks of adults with DD who reside at home? and (2) What is the quality of health care that this population receives regards to preventive health care and dental services? Methods: Data were collected on a sample of 238 adults with DD living at home with their family members who served as informants to fill out a questionnaire. Results: Health status, such as prevalence rates of high blood pressure, high cholesterol, obesity, and diabetes among adults aged 18-39 years, were comparable to those of their counterparts without disabilities. However, adults with DD aged 40 and older were more prevalent in obesity and physical inactivity; meanwhile they had lower rates of high blood pressure, high cholesterol, and cigarette smoking. Over 25% of the study subjects were taking psychotropic drugs. Although 86% of the study subjects had a physical examination within the past year, only 42% had received influenza vaccines. More than half of the study subjects had no dental insurance. Conclusions: People with DD have experienced health disparities. It is necessary to establish an effective quality assurance program that will promote healthy behaviors and provide preventive and dental services for people with developmental disabilities.

ASCERTAINING HEALTH-RELATED INFORMATION ON ADULTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: DATA COLLECTION AND RESULTS USING THE ROCHESTER HEALTH STATUS SURVEY

L.M. Robinson¹, P.W. Davidson¹, C.M. Henderson¹, M.P. Janicki², 1. *University of Rochester Medical Center, Rochester, New York, 2. University of Illinois at Chicago, Chicago, Illinois*

There is a lack of information about the health status and health care needs of people with intellectual or developmental disabilities (IDD) reaching older adulthood. Such information is needed to develop effective policies and practices that extend life, prevent morbidity, and increase the likelihood that persons with IDD can continue to lead independent and productive lives. We have developed the Rochester Health Status Survey (RHSS), a survey instrument to estimate health trajectories and health services utilization among older people with IDD. Cohorts have been surveyed in several sites in the US and in Israel and Taiwan. Our data indicate that health status changes with increasing age among people with IDD in a manner similar to what would be expected among people without IDD. However, there are disparities between trends for people with and without IDD. Organ system morbidity may vary with IDD diagnosis and as a function of provider practices. The trends identified in our research confirm some previous suspicions about health outcomes but also raise important questions regarding dental health and psychiatric and behavioral health. There is also a lack of information about the status of risk factors for acquiring diseases and disorders, in turn limiting the identification of strategies to prevent or reduce disease onset or severity. Defining and reducing disparities would be accelerated by more comprehensive data.

ADVERSE DRUG REACTIONS AND ADULTS WITH DOWN SYNDROME

R. Lucchino, *Utica College, Utica, New York*

There is no debating the fact that medications have been responsible for an increase in longevity and quality of life in the general population. The IDD population, especially Down's syndrome, is now reaching 60 to 80 year old age groups. As this population ages, so do the numbers of adverse drug reactions. The reason is three fold: a) age related biological changes, b) the number of medications person are consuming, and c) the aging- in of medications. The attention to ADR's has focused mainly on the general aging population, with very little focus on the IDD population. The concerns of medications and ADRs in the IDD population, especially the aging in of medications, will be the focus of this presentation. A new paradigm will be presented that equates changes in behavior and biology with ADRs that mimic age related changes that may be due to the aging-in of medications.

SESSION 790 (PAPER)

ARTHRITIS, PAIN AND PSYCHOSOCIAL FACTORS

FIT AND STRONG!: DISSEMINATION OF AN EVIDENCE-BASED INTERVENTION FOR OLDER ADULTS WITH OSTEOARTHRITIS

S. Hughes, R. Seymour, P. Desai, *Center for Research on Health and Aging, University of Illinois at Chicago, Chicago, Illinois*

The translation of evidence-based programs for older adults is a major public health priority. Fit and Strong! is an award winning evidence-based, multi-component exercise/behavior change program for older adults with osteoarthritis that is being diffused throughout the United States. Currently, two collaborative efforts are underway to translate and diffuse Fit and Strong!. The first effort is funded by the Centers for Disease Control and Prevention (CDC) and supports dissemination of the program in two states (1R18DP001140). Fit and Strong! is being diffused in two areas on aging in Illinois and two areas on aging in North Carolina with a minimum of 30 providers, involving the enrollment of 1,200 new participants. The Fit and Strong! team is also partnering with the National Arthritis Foundation (NAF) to translate and diffuse the program within four chapters: Northern and Southern New England, Northern California, Michigan, and Western Missouri/ Kansas. The goal of this partnership is to identify 24 new providers (6 per state) who can adopt the program, train and evaluate implementation of the program by 24 new instructors (6 per state) and enroll an additional 480 persons in the program. As a result of these efforts, we now offer the program in 7 states at 26 sites with 54 trained instructors and 292 participants. Pre-post outcomes and program evaluations are currently being collected. Factors that facilitate and impede program adoption, fidelity/adaptation, and sustainability will be discussed. Progress to date in translating/ diffusing the program will be described.

ROLE OF SOCIAL RELATIONS AND NEUROTICISM IN PSYCHOLOGICAL OUTCOMES FOR OLDER ADULTS WITH OSTEOARTHRITIS

A.M. Sherman, *Psychology, Oregon State University, Corvallis, Oregon*

Osteoarthritis (OA) is the most prevalent form of arthritis for older adults and can severely undermine psychological well-being. Psychological functioning (depressive symptoms, self-esteem, and life satisfaction) were investigated in the present study, using a sample of older adults (N = 160, mean age = 74 years) with self-reported OA. We investigated the relationship between social support, social strain, and neuroticism to the three outcomes. Hierarchical multiple regression analyses controlled for age, gender, income, and pain and severity of OA. Analyses indicated that neuroticism was significantly associated with all three outcomes, and further, that neuroticism fully mediated the association of social strain to all three outcomes, as well as the association of social support to self-esteem (using follow-up Sobel tests of mediation). Discussion will center on the contrasting mediation patterns for support and strain and the importance of evaluating both personality traits and existing social contexts for this population.

THE RECIPROCAL RELATIONSHIP BETWEEN PAIN AND DEPRESSION IN ARTHRITIC MEXICAN-AMERICAN OLDER ADULTS

M. Sutton, G.I. Caskie, *Lehigh University, Bethlehem, Pennsylvania*

Although previous research indicates a strong association between self-reported pain and depressive symptoms, the direction of this relationship has been greatly debated. In addition, few studies on the pain-depression link utilize ethnic minority older adults. The current study focuses on arthritis pain and depressive symptoms over seven years in a group of community-dwelling Mexican-American seniors from the Hispanic EPESE database. The direction and possible reciprocity of the relationship between pain and depression is examined utilizing a cross-

lagged panel design within a structural equation model. The total sample consisted of 1,166 participants reporting arthritis at baseline. Participants were, on average, 73 years old ($SD=6.6$), had 4.9 years of education (range=0-17), and included a total of 823 females and 343 males. The full model, in which all cross-lagged paths from pain-to-depression and depression-to-pain were estimated, showed good fit to the data ($\chi^2(8)=8.283$, $p=.406$, $TLI=.99$, $CFI=1.0$, $RMSEA=.006$). Including only the pain-to-depression paths or only the depression-to-pain paths significantly decreased the overall fit of the model when compared with the full model (both $ps<.01$), indicating that all cross-lagged paths should be included in the model. Although depression at waves 1 and 2 predicted pain at waves 2 and 3, respectively, all cross-lagged paths from pain to depression were significant (all $ps<.05$). Results show that, over this seven-year period, a reciprocal relationship existed between self-reported pain and depressive symptoms in this minority sample. These findings indicate that clinicians may need to take into account both pain and depressive symptomatology when working with older Mexican-American adults.

THE ROBUST ASSOCIATION BETWEEN CHILDHOOD PHYSICAL ABUSE AND OSTEOARTHRITIS IN ADULTHOOD: FINDINGS FROM A POPULATION BASED STUDY

E. Fuller-Thomson, M. Stefanyk, S. Brennenstuhl, *University of Toronto, Toronto, Ontario, Canada*

Research suggests a role of early life trauma in the development of arthritis. This study investigated the relationship between childhood physical abuse and osteoarthritis (OA) while controlling for age, gender, race, and socio-economic status (SES) in addition to the following types of risk factors for OA: 1) concurrent childhood stressors (ie. parental divorce, addictions and long term unemployment); 2) adult health behaviours (ie. obesity, smoking, alcohol consumption, activity level); and 3) depression. Data from the provinces Manitoba and Saskatchewan were selected from the 2005 Canadian Community Health Survey ($n=13,093$). Respondents with missing arthritis data or with arthritis types other than OA were excluded ($n=1,985$). Of the 11,108 remaining respondents, 854 reported childhood physical abuse by someone close to them and 1,452 reported that they had been diagnosed with OA by a health professional. The regional level response rate was 84%. When adjusting for controls and all three clusters of risk factors, a significant association between childhood physical abuse and OA was found of 1.56 (95% CI = 1.21, 2.00). The odds ratio for OA was only slightly higher at 1.99 (95% CI = 1.57, 2.52) when adjusting for sociodemographics (e.g. age, race, gender, education and household income). The association between childhood physical abuse and OA remained significant even after controlling for risk factors that may mediate the relationship. Further research is needed to investigate potential pathways through which arthritis develops as a consequence of childhood physical abuse.

PAIN, DISABILITY AND DEPRESSION IN OSTEOARTHRITIS: RACE AND SEX MAKE A DIFFERENCE

P. Parmelee¹, T.L. Harralson², J. DeCoster¹, H. Schumacher³, *1. Center for Mental Health & Aging, The University of Alabama, Tuscaloosa, Alabama, 2. Albert Einstein Medical Center, Philadelphia, Pennsylvania, 3. University of Pennsylvania, Philadelphia, Pennsylvania*

Chronic pain and disability are linked with depression in complex ways. However, aside from some evidence on differential experience and presentation of symptoms, there has been surprisingly little research on racial differences in pain, and virtually none on the pain-disability-depression link in minorities. This project therefore examined these dynamics among African American (AA; $N=94$) and Caucasian (CA; $N=269$) older persons ($M=68$ years) with diagnosed osteoarthritis of the knee (OA). In-person interviews used standardized measures of depressive symptoms, OA-related pain and disability, general health, and other

variables. A series of regression analyses examined demographic characteristics, OA severity (duration, joint count, one/both knees), perceived and objective general health, pain and disability as predictors of depressive symptoms. After adjusting for other predictors, expected positive relationships among pain, depression and disability remained for the sample as a whole. However, depressive symptoms were greater among CAs than AAs. There was also a significant interaction of race with disability. Here, the usual positive association was observed for CAs, but AAs displayed a negative relationship of pain with functional disability. Subgroup analyses examining sources of possible collinearity further revealed marked race by sex interactions. Specifically, AA men displayed much stronger correlations of depression with pain and disability than did CA men. These interactions did not extend to the depression – overall health association, and no interactive effects were observed among women. Discussion addresses possible sources of differences along with their implications for research on and treatment of pain among ethnic minorities. (Supported by R01 MH-51800)

SESSION 795 (SYMPOSIUM)

AWARENESS OF AGE-RELATED CHANGE: EXAMINATION OF A PROMISING CONCEPT

Chair: M.K. Diehl, *Human Development & Family Studies, Colorado State University, Fort Collins, Colorado*

Discussant: U. Staudinger, *Jacobs University Bremen, Bremen, Germany*

The purpose of this symposium is to provide a systematic examination of the concept of Awareness of Age-Related Change (AARC) and a comparison with already established concepts such as age identity and subjective age status. Although the awareness of getting older is a major subjective component of human development and the aging self, a systematic conceptualization of this phenomenon has so far not occurred in the social gerontological literature. For the purposes of this symposium, we define AARC to include all those experiences that make a person aware that his or her behavior, level of performance, or ways of experiencing life have changed as a consequence of increased chronological age. Although this definition has some affinity to already established concepts, such as subjective age status or age identity, we argue that AARC goes beyond these concepts and can play an integrative role in theoretical and empirical work. Specifically, we propose that the concept of AARC can play a critical role in accounting for several well-documented phenomena in aging research, including between-person differences in proactive and age-related compensatory behavior. During this symposium, the utility of the AARC concept will be examined in contrast and comparison with existing and new research on the function of age identity and subjective age status. Specifically, the concept of AARC will be critically examined in terms of its additional explanatory value with regard to outcomes such as life satisfaction and level of functioning in specific behavioral domains, such as cognitive functioning.

THE CONCEPT OF AWARENESS OF AGE-RELATED CHANGE: POTENTIAL OF INTEGRATION AND STIMULATION OF NEW RESEARCH

H. Wahl¹, M.K. Diehl², *1. University of Heidelberg, Heidelberg, Germany, 2. Colorado State University, Fort Collins, Colorado*

The awareness of having grown older is a major subjective experience during the adult years. Given the ubiquity of this experience, it is surprising that social gerontology still lacks a systematic body of respective theoretical and empirical work. The concept of Awareness of Age-Related Change (AARC) is introduced with the intention to integrate what research on subjective age experiences and age identity already offers. The main objective of this presentation and the overall symposium is to stimulate new research. We define AARC to include all those experiences that make a person aware that his or her behavior, level of

performance, or ways of experiencing life have changed as a consequence of increased chronological age. The sample domains of health and physical functioning, cognitive functioning, and interpersonal relations are used to illustrate the relevance of AARC. We end with an integrative framework and a conceptual model for a future research agenda.

AGE IDENTITY AND SELF-ESTEEM IN THE UNITED STATES AND THE NETHERLANDS: THE ROLE OF IDENTITY PROCESSES AND THE EXPERIENCE OF AGING

G.J. Westerhof¹, S.K. Whitbourne², 1. *Psychology and Communication of Health and Risk, University Twente, Enschede, Netherlands*, 2. *University of Massachusetts, Amherst, Massachusetts*

Feeling younger than one's chronological age is generally seen as a strategy to enhance self-esteem in a youth-oriented culture. This study examined identity processes and the personal experience of aging as possible mediators of this relation in persons between 40 and 85 years in the United States (N=377) and the Netherlands (N=249). Americans reported a more youthful age identity and a stronger use of assimilative identity strategies than the Dutch. They experienced the aging process less as physical loss and more as continued growth, but equally in terms of social loss. Identity processes mediated the relationship between age identity and self-esteem in both countries, but the personal experience of aging did so in a stronger way in the USA. The self-enhancing function of youthful identities is thus more a matter of personal experiences of the aging process in the more youth-oriented American culture than in the Netherlands.

TWELVE-YEAR CORRELATED CHANGES IN SUBJECTIVE COGNITIVE COMPLAINTS AND MEMORY IN OLD AGE

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The question of whether and how subjective cognitive complaints are related to memory performance represents a central issue in applied cognitive aging research. However, many cross-sectional studies have failed to find a strong association between subjective and actual cognitive performance. In the present study, the association between 12-year changes in cognitive complaints and memory performance was assessed in a sample of older adults (N = 297, mean age at T1: 62 years) from the Interdisciplinary Study on Adult Development (ILSE). Results show that level of cognitive complaints and level of memory functioning correlated .18 at T1. By contrast the correlation between changes in complaints and changes in memory was .61, showing that the effect size regarding changes was about ten times as large. We conclude that there is a strong association between complaints and memory performance, but that the association is a dynamic one.

"STILL AN OPTIMIST ...": FUTURE TIME PERSPECTIVE, RESIDUAL LIFETIME, AND OPTIMISM IN OLD AGE

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It is an essential characteristic of ageing that perceived residual lifetime and future time perspective diminish with increasing age; the temporal space for realizing one's projects get smaller the closer one gets to one's life expectancy. While future time perspective describes the temporal space and the projects to be realized within that space, optimism as a further construct also contains expectations about one's future in the form of generalized outcome expectancies. All three concepts – future time perspective, residual lifetime, and optimism – are involved in the process of regulating age awareness, and differing relations between these may be expected. Starting with a sample of 2.175 elderly adults between 50 and 90 years of age, the current study investigated the relations between the three concepts across four age groups as well as their relation with life satisfaction; all concepts were assessed using questionnaires. Findings showed (a) that the correlation between future time perspective and optimism diminishes in a cross-sectional

comparison across age groups, (b) life satisfaction was significantly predicted by age, optimism and future time perspective, and (c) optimism proved to moderate the relation between limited future time and life satisfaction.

SESSION 800 (SYMPOSIUM)

COGNITION AND FUNCTIONING IN LATE LIFE: A SYMPOSIUM IN MEMORY OF STIG BERG

Chair: S.H. Zarit, *Human Development & Family Studies, Penn State University, University Park, Pennsylvania*

Discussant: M. Gatz, *University of Southern California, Los Angeles, California*

The papers in this symposium celebrate the career of Stig Berg, the long-time director of the Institute of Gerontology at Jönköping University who died earlier this year. Dr. Berg was a pioneer in studying the junction of behavioral, social and biological processes in late life. In an initial paper, Gerald McClearn provides an overview of Dr. Berg's career and role as a catalyst in developing groundbreaking studies of older twins and other longitudinal studies of late life. The remaining papers present current findings from studies of which Dr. Berg had been a part. Nancy Pedersen and colleagues demonstrate the interplay of genetic and environmental influences on cognitive decline in later life, suggesting that the environment affects the timing of decline. A specific risk for cognitive decline is obesity. Anna Dahl and colleagues show that body mass index in middle age contributes to steeper decline in selected cognitive abilities over a period of 18 years. Another major influence on health and mortality is gender. Using a sample of unlike sex twins that controls for the effects of early experience, Carol Gold and colleagues demonstrate that gender influences number of health conditions, health behaviors, and functioning, as well as the sequence of events leading to functional decline and mortality. Bo Malmberg uses a resource model to investigate people's responses to environmental demands. Measures of actual and perceived resources provide distinct and complementary perspectives on resources and together provide a better understanding of functioning in old age.

THE CHANGING ROLES OF GENES AND ENVIRONMENTS IN COGNITIVE AGING AND DEMENTIA

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Paradoxically, genetic variance appears to decrease longitudinally for fluid and speeded cognitive domains, yet genetic variance for memory increases and Alzheimer's disease evinces substantial heritability late in life, much greater than that for longevity or remaining life span. We and Stig Berg have recently analyzed longitudinal cognitive test scores with change point models and dynamic change models. Results suggest that while genetic influences may be important for individual differences in initial levels, decline and accelerated cognitive decline, environmental influences are key for timing of entry into a period of decline. These findings underscore the dynamic nature of the interplay between genes and environments for the aging process.

ACTUAL AND PERCEIVED RESOURCES IN AGING

B. Malmberg, *Institute of Gerontology, School of Health Sciences, Jönköping, Sweden*

A resource theoretical model with categories of actual and perceived resources in relation to environmental demands could be useful in gerontology to understand feelings and behavior in old age. It is well known in social welfare studies and gerontology that it is necessary to consider both objectively measured resources and the individual's perception of these resources separate, although actual and perceived resources

are often intermingled. One reason for keeping actual and perceived resources apart is that the actual resources only account for one aspect of the perceived resources. Swedish data are used to illustrate the adequacy of using both concepts. Discrepancies are discussed in terms of measurement problems, earlier experiences, the surrounding environment and personal style of answering. Studies where the distinction between actual and perceived resources helps us better understand results are presented.

STIG BERG: ACADEMIC CATALYST PAR EXCELLENCE

G.E. McClearn, *Biobehavioral Health, Penn State University, University Park, Pennsylvania*

This paper will present a brief history of the collaborative enterprise in interdisciplinary gerontology of which Stig Berg was a leader. Begun from an exchange of technical information concerning measurement of cognitive functioning, the venture matured into an extensive network of collaborators pursuing research and training in the richly complex junction of behavioral, social and biological perspectives on aging. Research populations were established and characterized, collaborative courses were designed, student and faculty exchanges were arranged, and joint academic appointments were made. In all of these developments, Stig was an irreplaceable motivating and facilitating figure. Not only will the continuing generation of research results and training of students from this consortium be a testimonial to his career; the memory of his humanity will be an abiding inspiration.

MIDLIFE BODY MASS INDEX AND LONGITUDINAL TRAJECTORIES OF COGNITIVE CHANGE IN LATE LIFE: FINDINGS FROM THE SWEDISH ADOPTION/TWIN STUDY OF AGING

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This study examines the relationship between body mass index (BMI) assessed 1963 or 1973 and general cognitive ability, verbal abilities, spatial abilities, memory, and perceptual speed measured five times over 18 years beginning in 1986 as part of the longitudinal Swedish Adoption/Twin Study of Aging. The 781 participants were aged 25-63 (mean age 41.6 years) when BMI was assessed. Latent growth curve models adjusted for twinning showed that persons with higher midlife BMI scores had lower mean level cognitive test performance across all domains. Midlife BMI also predicted steeper decline for general cognitive ability and spatial abilities, but not for verbal abilities, memory, and perceptual speed. We conclude that midlife overweight is associated with lower cognitive abilities in late life and especially with steeper decline in spatial abilities. Prevention of overweight and obesity in midlife might be important for cognitive functioning in late life.

THE GENDER STUDY: A LONGITUDINAL STUDY OF HEALTH AND BEHAVIOR OF OLDER UNLIKE-SEX TWINS IN SWEDEN

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The Gender Study is a comprehensive program of research on older unlike-sex twins, providing an ideal sample for examination of gender differences in the aging process. The nationally-based sample of 605 twinpairs responded to a survey that assessed health and behaviors. A subsample (N=249 pairs) were then investigated in their homes by nurses who assessed their health and functioning in greater detail (3 visits per

subject over 8 years). Blood samples were collected; most twins released their medical records to us. Analyses have found important gender differences in numbers and severity of conditions, behaviors, and functioning, e.g., men suffered more depressive symptoms than women as disability increased. Currently we are examining gender differences in the sequential patterns of disease history and functional ability. For example, among those with diabetes, women have higher rates of hypertension, with 74% diagnosed with hypertension first (compared with 50% of men with same co-morbid pattern).

SESSION 805 (POSTER)

COGNITION I

NOCTURNAL SUBJECTIVE SLEEP AND DAYTIME COGNITIVE FUNCTIONING IN OLDER ADULTS WITH INSOMNIA

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Disturbance of daytime functioning is a hallmark of insomnia. However, such disturbances have been difficult to illustrate empirically. This study sought to examine the relationship between nocturnal subjective (i.e., self-rated) sleep and daytime cognitive functioning in a sample of fifty older adults with insomnia (Mage = 69.10 years, SDage = 7.02 years). This study employed daily home-based assessment utilizing sleep diaries and paper/pencil self-administered cognitive measures (i.e., Letter Series and Symbol Digit; reasoning and processing speed, respectively). Measures were completed over fourteen consecutive days. Regression analysis revealed: (1) longer reported duration of insomnia (# months of perceived insomnia) was related to better reasoning performance, $\beta = 0.32$, $p < 0.05$, and (2) increased average amount of time spent laying in bed awake each night was associated with better processing speed performance, $\beta = 0.52$, $p < 0.05$. Models accounted for a large amount of the variance in cognitive functioning, reasoning $R^2 = 25\%$; processing speed $R^2 = 28\%$. Discussion of these surprising findings will consider potential explanations, including: (1) whether potential adaptation or habituation to insomnia symptoms may occur over time, (2) whether older adults with insomnia are getting their physiological sleep needs met, and (3) whether unmeasured influences, like caffeine, lead to spurious associations. Future investigations should collect multiple indicators of sleep and cognitive functioning and should recruit mixed samples of older adults with/without insomnia in order to better disentangle the relationship between nocturnal sleep and daytime cognitive functioning in older adults.

COGNITIVE REASONING ABILITY IN PERSONS WITH PARKINSON'S DISEASE

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In addition to mobility impairment, individuals with Parkinson's disease (PD) also experience cognitive difficulties (Raskin et al., 1990). Even though cognitive difficulties, rather than physical impairments, are better indicators of future disability and long-term care (Bronnick et al., 2006; Aarsland et al., 2005), cognitive reasoning has not been examined in relation to PD. The purpose of the present study is to compare cognitive reasoning for instrumental activities of daily living among persons with and without PD. The study included 29 community-dwelling older adults (55 to 84 years of age), 19 of whom had PD. The Everyday Cognition Battery (ECB; Allaire & Marsiske, 1999) was used to measure cognitive reasoning for everyday tasks such as medication use and financial management. Using MANOVA, results indicated that participants with and without PD did not differ in terms of education,

age, vision, mental status, or depressive symptoms, Wilks' $\Lambda=0.779$, $F(5, 23)=1.30$, $p=0.297$. However, when comparing ECB performance using a T-test, results showed significant differences between the two groups ($t(26)=2.65$, $p=0.013$). The PD group scored lower, suggesting greater difficulty with everyday reasoning tasks. This is significant in that reasoning difficulties could affect the ability to live independently and make medical treatment decisions (Griffith et al., 2005).

PREDICTORS OF NEUROPSYCHOLOGICAL PERFORMANCE AMONG HIV-POSITIVE AGING ADULTS

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In the US, with 25% of those with HIV being 50 and over, there is concern that cognitive deficits may become pronounced as people age with this disease. The objective of this study was to identify predictors of neuropsychological performance among adults with HIV. The sample included 98 HIV-positive adults with a mean age of 45.2 (24-67). Participants completed psychosocial measures (Lubben Social Network Scale, Profile of Mood States, drug use) as well as neuropsychological measures of speed of processing (Useful Field of View, Complex Reaction Time Test, Digit Symbol Substitution), executive function (CLOX, Trails B), psychomotor ability (Trails A, Finger Tapping Test, Digit Symbol Copy), and memory (Digit Span, Spatial Span). Regression analyses investigated predictors of neuropsychological performance. Step 1 examined the contribution of age and education quality (WRAT-3 Reading), and step 2 examined the contribution of health on performance. Results indicated older age, poorer educational quality, mood problems and higher drug use predicted poor performance on several neuropsychological measures. The individual regression models for each measure explained 8-34% of the variability. Overall this study posits that among adults with HIV, the best predictors of neuropsychological deficits were older age and poorer quality of education. Additional predictors of cognitive deficits included mood problems and drug use. Health factors such as years diagnosed with HIV, and the size of social network were not predictors in any models. Results suggest that those aging with HIV are subject to decreases in cognitive functioning. Implications for clinical and research settings are provided.

SMOKING INCREASES RISK FOR COGNITIVE DECLINE AMONG COMMUNITY-DWELLING OLDER MEXICAN AMERICANS

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Few studies have investigated the relation between smoking and cognitive decline among older Mexican Americans, one of the fastest growing populations in the US. In the current study we explore the relationship between smoking status and cognitive changes over time in a large sample ($N=1557$) of community-dwelling adults age 65 and older of Mexican descent obtained from the Hispanic Established Populations for Epidemiologic Studies of the Elderly (H-EPESE). Latent growth curve analyses were used to examine the decreasing growth in the number of correct responses on a test of cognitive functioning with increasing age (7 years with 4 data collection points). In-home interviews were obtained from community-dwelling older Mexican Americans residing in the Southwest United States. Cognitive functioning was assessed at each of the 4 data collection points with the Mini-Mental Status Examination (MMSE). Participants' self-reports of health functioning and smoking status were obtained at baseline. With the inclusion of health variables and other control variables (e.g., demographics, socioeconomic status, and physical functioning), the effect of smoking status on cognitive functioning was significant such that the decrease in the number of correct responses over time on the MMSE was greater for smokers than for non-smokers. Therefore, in the current study we found that

smoking increases risk for cognitive decline among community-dwelling older Mexican Americans. There are numerous health benefits in quitting smoking, even for older adults who have been smoking for many years. Further efforts to ensure that smoking cessation and prevention programs are targeted toward Hispanics are necessary.

VASCULAR RISK FACTORS IN RELATION TO UFOV PERFORMANCE AND DRIVING EXPOSURE

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Vascular risk factors – hypertension, diabetes, and high cholesterol – were examined as predictors of useful field of view (UFOV) performance and driving exposure in a sample of 297 older drivers (age 75+) who participated in the State Farm Senior Driver Research Project in Alabama. UFOV is a measure of visual processing speed and attention previously established as a screening test for prediction of crash involvement in older adults. Driving exposure, an indicator of mobility, was measured using a composite of days and miles driven per week. Mean age of participants was 79.5 years ($SD=3.8$), 95% were Caucasian, and 44% were female. Vascular risk factors were self-reported; 54% of participants had hypertension, 15% had diabetes, and 46% had high cholesterol. Logistic regression was used to examine odds of poor performance on the UFOV based on a previously established cutoff. In analyses controlling for age, gender, education, and depressive symptoms, diabetes was associated with UFOV performance indicative of elevated crash risk (odds ratio [OR]=2.11, 95% confidence interval 1.07-4.14, $p=.030$). Hypertension (OR=0.76, 95% CI 0.46-1.27, $p=.297$) and high cholesterol (OR=0.73, 95% CI 0.44-1.20, $p=.214$) were not. Multiple regression models were used to examine driving exposure as an outcome, though none of the vascular risk factors were significantly associated with driving exposure. Findings support a link between diabetes and UFOV performance, suggesting that individuals with diabetes may be at risk for negative driving outcomes, such as elevated crash risk.

PERFORMANCE-BASED MEASURES OF COGNITIVE AND EVERYDAY FUNCTION IN RELATION TO LIFE-SPACE

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Life-space, a measure of spatial extent of one's day-to-day life, reflects everyday function beyond traditional IADL measures. We utilized multiple regression analyses to examine associations between performance-based measures of cognitive and everyday function and life-space using baseline data from the ACTIVE study, which included 2,446 adults age 65+ who had complete data for variables of interest. Cognitive function was measured by composite scores from neuropsychological tests of memory, reasoning, and processing speed. Performance-based measures of everyday function included the Everyday Problems Test (EPT), Observed Tasks of Daily Living (OTDL), and Timed Instrumental Activities of Daily Living (TIADL). Life-space was measured on a 9-point scale from the Life Space Questionnaire. Mean age of participants was 74 years ($SD=5.9$), mean MMSE score was 27 ($SD=2.0$), and mean life-space score was 7.20 ($SD=1.24$). In models that controlled for age, gender, race, years of education, depressive symptoms (12-item CES-D), and physical functioning (SF-36 Physical Component Score), each composite domain of cognitive function predicted life-space in separate models (memory $B=.089$, $p<.001$; reasoning $B=.117$, $p<.001$; speed of processing $B=-.067$; $p=.001$). To investigate whether performance-based measures of everyday function added predictive utility, these measures were included in additional multiple regression models controlling for demographic factors and the cognitive composite scores. TIADL significantly predicted life-space ($B=-.097$, $p<.001$), as did EPT ($B=.086$, $p=.003$). Findings support an association between cognitive function and day-to-day function measured by life-space, with evidence that performance-based functional tasks may increase predic-

tive utility beyond that provided solely by the more traditional cognitive tests.

AN EXAMINATION OF FUNCTIONAL SOCIAL SUPPORT AND COGNITIVE FUNCTION IN OLDER ADULTS

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Social support has long been identified as a “buffer” against the pathogenic effects of stress. Social support is found to be protective against poor outcomes for a number of other indices of well-being. The presence or absence of social support has been associated with increased cognitive performance and cognitive declines, respectively. In examining the association between social support and cognitive function, it may be important to understand the function that social networks serve rather than just the structure or persons involved in the social network. The purpose of the analysis was to determine whether the receipt of four types of functional social support (i.e. appraisal, belonging, self-esteem, and tangible) helps to explain variability in cognitive function. It was hypothesized that more functional support received would predict greater performance across a number of cognitive domains. Participants were 178 stroke- and dementia-free older adults [M(SD) age = 66.48 (6.83); M (SD) education = 16.26 (2.94)]. Participants completed the Interpersonal Support Evaluation List (ISEL) and neuropsychological tests that assessed learning, memory, and abstraction ability. Blood pressure, cholesterol, fasting glucose, and BMI were also assessed. Linear regression was used to analyze the relations between functional social support and cognitive performance after for controlling for age, gender, education, and health status variables. Results showed that more functional social support predicted greater performance across these cognitive domains after controlling for the covariates. Findings suggest that social support received may play a role in preserving or buffering late life losses in cognitive function.

DIABETES AND COGNITIVE DECLINE IN OLDER AFRICAN AMERICANS AND WHITES

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There is recent evidence that diabetes may be associated with greater risk of cognitive decline and dementia in older adulthood. We sought to examine the relationship between diabetes and four-year change in cognitive function as well as investigate factors related to health disparities – race, vascular risk factors, and health care access and utilization – as potential moderators of this association. Participants were 624 community-dwelling older adults (age 65+) living in central Alabama. Diabetes was ascertained by self-report with physician, hospital discharge, or medication verification at baseline. Cognitive decline was measured by change in Mini-Mental State Examination (MMSE) score. Mean age of participants at baseline was 74 years (SD=5.9), 49% were African American, 53% were female, mean MMSE score was 26 (SD=3.9), and 25% had diabetes. In a multiple regression analysis controlling for age, gender, race, level of education, urban/rural residence and baseline MMSE, diabetes at baseline predicted future cognitive decline ($\beta=.69$, $p=.01$). This association remained statistically significant after additional adjustment for baseline physical activity, depressive symptoms, vascular risk factors, and diabetes-related comorbidity ($\beta=.58$, $p=.04$). Potential interactions between diabetes and race, vascular risk factors, and health care access and utilization were investigated. Only health utilization moderated the association between diabetes and cognitive decline, whereby participants who reported absence of visiting a physi-

cian within the past six months experienced significantly more cognitive decline than those with more frequent physician contact. Findings support a link between diabetes and cognitive decline and suggest that seeing a physician more regularly may help prevent decline.

USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR COGNITIVE FUNCTION: RESULTS OF A NATIONAL SURVEY

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Half of U.S. adults ages 50+ use complementary and alternative medicine (CAM). Adults are concerned about cognitive health; little research has examined their CAM use responding to that concern. Data were from the 2007 National Health Interview Survey (NHIS). Analyses included chi-square and multivariate logistic analysis, accounting for the survey design and weighted for national representativeness. Controls included age, sex, race/ethnicity, education, marital status, health insurance, comorbidities, self-reported health, recent health changes, smoking, body mass index, and region. We examined CAM use both including and excluding vitamins; reported results, for ages 50+ (10,104 respondents), include vitamins. Of those without cognitive problems, 8.4% used CAM; of the 11% with cognitive problems, 12.1% did so ($p<.01$). Of the 16.2% of the population taking herbal supplements, 14.6% took them “to improve mental ability or memory”; of 55.4% taking vitamins, 13.2% did so for that purpose. In adjusted results, people reporting cognitive problems were notably more likely to use CAM “to treat” the problems than others were “to prevent” them (Odds Ratio 1.56, 95% Confidence Interval 1.21-2.00). Of those using CAM, 27% said they do not tell their health providers. Results suggest a substantial number of older Americans use CAM specifically to prevent or treat cognitive problems. People with cognitive problems are notably more likely to use CAM than those without them. Individuals with cognitive problems should be encouraged to discuss CAM use with health providers, as some CAMs, particularly herbal supplements, may interact with conventional therapies often prescribed for older people.

MODERATORS AND MEDIATORS OF COGNITIVE DEFICITS ASSOCIATED WITH AGING AND TYPE 2 DIABETES

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Type 2 diabetes is increasing in prevalence in North American older adults and may be linked to a heightened risk of cognitive deficits and dementia. The Victoria Longitudinal Study (VLS) is positioned to contribute to the resolution of inconsistent diabetes-cognition findings. In two previous VLS studies, we observed robust diabetes-related deficits in cognitive speed and speed-intensive executive functioning, both cross-sectionally (Yeung, Fischer, & Dixon, 2009) and longitudinally (Fischer, de Frias, Yeung, & Dixon, in press). In the present study, we examined the roles of 13 commonly cited potential covariates of diabetes-cognition relationships. Specifically, we tested whether VLS indicators from the domains of subjective health, physical/biological fitness, lifestyle activities, and personal affect served as significant covariates, moderators, or mediators of group differences. Using data from VLS Sample 3 (Wave 1 2002-03; $n = 577$; age range = 53 to 85 years), we followed documented multi-step diagnoses and applied recommended exclusionary criteria (e.g., type 1 diabetes, dementia, comorbidities). Study sample consisted of diabetes ($n = 41$, M age = 68.6) and control ($n = 465$, M age = 67.5) groups. Three main results are reported. First, six significant covariates were identified (depression, negative affect, blood pressure, gait/balance, subjective health, BMI).

Second, using established regression methods, we found that depression and negative affect moderated the effect of diabetes on two cognitive speed measures. Third, mediator analyses showed systolic blood pressure, gait/balance, and subjective health mediated the relationship between diabetes and a consistent set of speed, executive functioning, and episodic memory measures.

THE ROLE OF POSITIVE WELL-BEING AS A BUFFER OF COGNITIVE DECLINE IN OLDER ADULTS

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The literature suggests that aspects of positive well-being influence cognitive functioning. To date, however, there are no prospective investigations examining positive well-being as a predictor of future memory performance. Hence, one of the goals of this study was to determine if positive well-being protects against or reduces cognitive decline over time. A second goal of this study was to determine if depression mediates the relationship between positive well-being and cognitive decline. Using data from the Health and Retirement Study, the authors examined whether positive well-being was predictive of memory change over four years in a community dwelling sample of persons aged 50 or older. Change in memory was quantified as the total score on a measure of immediate and delayed recall of a word list. Positive well-being was measured using an experimental measure consisting of questions addressing positive feelings about life and health. Finally depression was assessed using an abbreviated version of the Center for Epidemiological Studies – Depression Scale (CES-D). Hierarchical multiple linear regressions revealed positive well-being to be a significant predictor of cognition at a four year follow-up. Further analyses revealed this relationship to be partially mediated by depression. This study provides evidence that people with higher positive well-being had less cognitive decline over time, lending more support to the role of positive well-being in cognitive functioning. Future research should focus on identifying the specific aspects of positive well-being that are most important in cognitive functioning.

SELF-EFFICACY, MEMORY, & IDENTITY PROCESSES IN OLDER ADULTS

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Memory is a salient area of functioning in adulthood known to be influenced by beliefs about performance, including self-efficacy (Hess, Hinson, & Hodges, 2009) and stereotype threat (Hess, Hinson, & Statham, 2004). In the present study, the influence of feedback on self-efficacy and memory performance was examined by comparing the performance of 98 older adults ($M=70.05$, 60-90) randomly assigned to conditions of positive, neutral, or no feedback. Participants' self-efficacy was measured following presentation of feedback. Based on previous research showing relationships between identity and memory control beliefs (Jones, Whitbourne, Whitbourne, Skultety, in press), memory performance under the three feedback conditions was assessed in relation to the process of identity accommodation (IAC; changing identity in response to age-related changes). Path analyses tested self-efficacy as a mediator of the relationship between IAC and memory performance, and whether feedback moderated this process. The hypothesis of mediation was not supported; however there was evidence that the relationship between self-efficacy and memory differed by feedback. While preliminary analyses showed no support for the role of IAC a significant relationship between self-efficacy and memory was found in the positive feedback group ($b=.28$, $SE=.14$, $t=1.96$). Further, model comparison tests indicated that these paths were significantly different in the neutral-no vs. positive feedback conditions (chi-square change= 5.17 , $df=1$, $p=.03$). In addition to showing support for the relationship

between self-efficacy and memory in older adults, the current study demonstrated that, when compared to neutral or no feedback, positive feedback enhanced the effect of self-efficacy on performance.

ATTENTIONAL CONTROL AND COGNITIVE PERFORMANCE: AN INTRUSIVE THINKING INDUCTION EXPERIMENT

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Previous research suggests that there is an inhibitory deficit/ decrease in attentional control across the lifespan and these deficits are negatively related to cognitive performance. Although there appears to be a negative effect of attentional control on cognitive functioning, previous research has not examined whether or not this negative effect is the same across age groups. For the current study, we randomized 160 younger and 100 older adults into two groups: 1) experimental group (EG) - those who received a negative life events (NLE) questionnaire prior to cognitive testing; and 2) control group (CG) - those who received a NLE questionnaire after cognitive testing. We utilized the Thought Occurrence Questionnaire, the Cognitive Interference Questionnaire and the Impact of Events Scale to assess intrusive thinking (IT- our measures of attentional control). The participants completed seven cognitive tasks that were z-scored and combined to create an overall cognitive performance measure. The results revealed that the older adults in the EG reported more IT compared to both the older adults in the CG and the younger adults in the EG. Furthermore, regression analyses revealed a significant 3-way interaction where the older adults in the EG who reported more IT demonstrated the poorest cognitive performance. The current findings suggest that the placement of questionnaires evaluating life stressors may have an impact on cognitive performance especially for older adult participants.

AGE DIFFERENCES IN THE CALIBRATION OF WORD RECALL PREDICTIONS

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Calibration is an approach where people predict how well they might perform on a task and then adjust later predictions based on actual task performance and other variables. Research on age differences in calibration has not been as abundant as research on age differences for other metacognitive processes. This study was designed to explore age differences in the calibration process for word list recall in younger and older adults. The participants were 59 older adults volunteers ($M\text{ Age} = 76.83$ years, $SD = 8.28$) from the Atlanta area and 51 younger adults ($M\text{ Age} = 21.19$ years, $SD = 3.22$) solicited for participation through the Georgia State University. Each participant was asked to give a prediction of their word recall performance before taking the immediate task. After a 20 minute delay, participants were again asked to predict their word recall performance. Their predictions consisted of giving a number from 0-30 with 30 being the total number of words in the list. Calibration was designated as the residualized difference between posttest and pretest prediction. We used separate regression analyses for young and older adults to examine differential predictors of calibration and included actual test performance and memory self-efficacy as potential predictors. For the younger adults, both actual and perceived performance on the initial tests predicted their calibration. However, for the older adults, actual and perceived performance on the delayed test predicted calibration. These results suggest that younger and older adults are using different information to make their predictions of performance.

THE ROLE OF AGE AND AFFECT IN RISK PERCEPTION: A PROSPECT THEORY APPROACH

T.L. Queen, T.M. Hess, *Psychology, North Carolina State University, Raleigh, North Carolina*

Prospect theory has become a widely used model of risk in the decision making literature (Tversky & Kahneman, 1987). Research based on this theory has shown that individuals overweight the likelihood of occurrence of small probabilities and underweight the occurrence of large probabilities. This research has focused primarily on younger adults' probability weighting. Age differences may exist in this weighting function due to increased attention to affective information in later life, which may lead to greater probability neglect (Peters et al, 2007; Finucane, 2008). That is, due to declines in deliberative resources, older adults may seek out emotional information which may affect how likely they perceive highly probable versus less probable events to occur. This tendency may result in differential risk perception in younger and older adults. The goal of this study was to examine age differences in a traditional prospect theory task. Participants aged 23-85 were presented with 4 gambles and indicated how much money they would have to receive to forgo the gamble. Gambles were either presented as percentages (i.e. 1% chance of winning \$100) or ratios (i.e. 99/100 chance of winning \$100). In the ratio condition, older adults underestimated the likelihood of highly probable events whereas younger adults overestimated less probable events. Both younger and older adults displayed typical prospect theory findings in the percentage condition. Participants' probability weightings were moderated by their numeracy level; thus, less numerate participants displayed emphasized over and underweightings of probabilities. These results suggest that older and younger adults perceive risk differently.

CORTISOL RESPONSE TO COGNITIVE CHALLENGE: AGE AND TIME OF DAY DIFFERENCES AND RELATIONSHIP TO WORKING MEMORY

G.E. Ennis, S. Neupert, *Psychology, NC State University, Raleigh, North Carolina*

Experimental studies have suggested that acute cortisol elevations affect working memory whenever elevations are substantial and working memory load is high (Oei, Everaerd, Elzinga, Van Well, & Bermond, 2006; Lupien, Gillin, & Hauger, 1999). Whether such effects are also dependent upon time of day of testing have not been fully investigated (Het, Ramlow & Wolf, 2005). Using data from the Boston subsample of the second phase of the Midlife Development in the United States national survey, the present study explored whether acute cortisol elevations occurring during an in-home cognitive testing battery would be associated with working memory impairment and whether such effects would be moderated by age and time of day of testing. Cortisol was measured as change from baseline to the time just prior to the working memory test. Controlling for education and baseline cortisol, moderated regression revealed an Age X Cortisol Change X Time of Day interaction associated with working memory performance. Decomposition of this interaction suggested that older adult cortisol responders tested in the afternoon had similar working memory scores as younger and middle-aged adult cortisol responders tested at this same time. Since cortisol response to cognitive testing has been associated with increased education in older adults (Neupert, Miller, & Lachman, 2006), a multilevel model examined whether cortisol reactivity was associated with age, education and time of day of testing. Results suggested that educated older adults had increased cortisol reactivity in the afternoon compared to older adults tested in the morning, regardless of educational status.

NUMBER AND SEVERITY OF PAST DEPRESSIVE EPISODES PREDICTS HIPPOCAMPAL VOLUME IN OLDER ADULTS

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Past studies have demonstrated that depression is a risk factor for subsequent cognitive decline (CD), yet there is some controversy as to the cause(s) of this relationship. Dementia may cause depression; alternatively, depression may be an etiological factor in the development of dementia. In the former case, depressive symptoms may be an early prodrome of dementia, or may be an initial response to the individual's experience of changes in cognitive functioning. In the latter case, the depressive disorder may accelerate the clinical manifestation of dementing diseases. Specifically, depression may damage the hippocampus through a glucocorticoid cascade, which results in neuronal death in the hippocampus, and consequent hippocampal atrophy. The aim of this study was to examine the glucocorticoid cascade hypothesis. We studied a sample of depressed, community-dwelling older adults who presented for treatment at a university medical center. All participants received a structured interview assessing current symptoms and past depressive episodes, and underwent structural MRI at baseline, we examined the relationship of number and severity of past depressive episodes to current hippocampal volume, and compared our results to health controls. Results highlight the importance of diagnosing and treating depression in the prevention of cognitive decline. However, a limitation of this study is its cross-sectional design: conclusions regarding causality can not be confirmed. Further studies might prospectively examine the relationship of depressive symptoms and subsequent hippocampal volume and cognitive status. After attending this activity, participants will understand one important biological factor in cognitive decline among older adults.

SESSION 810 (SYMPOSIUM)

COORDINATED AND POOLED DATA ANALYSES OF LONGITUDINAL STUDIES OF AGING AND DEMENTIA-RELATED CHANGE IN COGNITION, AFFECT, AND PHYSICAL FUNCTIONING

Chair: *S.M. Hofer, Dept. of Psychology, University of Victoria, Victoria, British Columbia, Canada*

Replication of research findings across independent longitudinal studies is essential for a cumulative and innovative gerontological science. However, comparison of results from longitudinal studies is often limited by the available published information, different designs and measurements, idiosyncratic analyses, and practical limits on full reporting of results. These challenges are essential to take into account in a cumulative science and may best be resolved through a collaborative research process. Both coordinated and pooled data analysis approaches can provide a broad foundation for cumulating scientific knowledge by facilitating efficient analysis of multiple studies in ways that maximize comparability of results and permit evaluation of study differences. Brent Small and colleagues report on changes in cognitive functioning observed prior to the diagnosis of dementia in a pooled data analysis of five studies. Magnus Lindwall and colleagues consider the link between physical exercise and cognitive function in a coordinated analysis of three Swedish studies. Scott Hofer, Andrea Piccinin, and colleagues present a comparative analysis of patterns of between-person age differences and within-person age changes in cognitive functioning across multiple longitudinal studies. Tessa Van den Kommer, Hannie Comijs, and colleagues discuss results from a classification model for the diagnosis of dementia using self-report, functional, and blood markers across Dutch and Swedish studies. Martin Sliwinski and colleagues examine change and within-person coupling of daily measures of stress and negative affect using data from two daily diary studies based on measure-

ment burst designs. Discussion will focus on strengths and challenges for collaborative analysis of longitudinal studies.

INTEGRATIVE ANALYSIS OF LONGITUDINAL STUDIES OF AGING (IALSA): PATTERNS OF BETWEEN-PERSON AGE DIFFERENCES AND WITHIN-PERSON CHANGES IN COGNITIVE CAPABILITIES WITH AGE

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Describing and understanding influences on patterns of change in cognitive capabilities has been a major endeavor in lifespan developmental research. Numerous studies have contributed in this regard, with important differences observed between cross-sectional and longitudinal analyses. In addition, measurement and design characteristics (e.g., language, culture, history, demographics) across longitudinal studies must be considered in cross-study comparison. We present results from the Integrative Analysis of Longitudinal Studies of Aging (IALSA) network focused on comparison of patterns of average change in various types of cognitive functions with age. The cross-study, cross-construct comparison of patterns of change in distinct cognitive domains provides evidence for the sensitivity and specificity of particular cognitive measures (i.e., memory, reasoning, speed) and a basis for directly comparing further explanatory models of change. The results demonstrate the importance of not assuming convergence of BP and WP effects in models of change.

CHANGES IN COGNITIVE PERFORMANCE IN PRECLINICAL ALZHEIMER'S DISEASE: A COLLABORATIVE ANALYSIS

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Preclinical Alzheimer's Disease (AD) refers to a period of time prior to diagnosis where cognitive deficits are present among persons who will go on to be diagnosed with AD. Understanding the nature of changes in cognitive performance during the preclinical period is paramount, because it may allow us to identify persons at greatest risk of being diagnosed with AD and apply prophylactic treatments to slow the course of the disease. In the current study, changes in cognitive performance were examined by pooling data from 6 longitudinal studies of aging and dementia, which included 4,578 persons who were nondemented and 994 individuals who would develop AD across the follow-up period. Results indicate that changes in cognitive performance in preclinical AD are characterized by relative stability of differences that are evident many years prior to diagnosis, followed by rapid declines just prior to diagnosis.

PHYSICAL EXERCISE AND COGNITIVE FUNCTION IN OLD AGE: INVESTIGATING THE SAME RESEARCH QUESTION IN THREE DIFFERENT SWEDISH POPULATION STUDIES SIMULTANEOUSLY

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Although reviews and recent studies show support for the notion that physical exercise may be protective of future cognitive decline and risk

of dementia, the question of dose-response in this relation is still unclear. Different studies show different results and draw different conclusions depending on the particular characteristics and methods used. Therefore, the purpose of this study was to conduct a coordinated analysis of the relation between exercise and cognitive status, and dose-response in this relation, in three large prospective population studies simultaneously. Data were drawn from the following three population studies: (a) Origins of Variance in the Old-old: Octogenarian Twins (OCTO-Twin); (b) Gothenburg Longitudinal Study of Aging (H70); (c) The Swedish National Study on Aging and Care (SNAC). Despite the different measures for exercise and cognition used, a similar trend was observed in the results; a moderate rather than strenuous dose was related to maintained cognitive function.

CLASSIFICATION MODELS FOR EARLY IDENTIFICATION OF PERSONS AT RISK FOR DEMENTIA, A REPLICATION STUDY

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The objective was to replicate classification models for early identification of persons at risk for dementia that were previously established in the Longitudinal Aging Study Amsterdam (LASA). Therefore data were drawn from the OCTO-Twin study, including 521 nondemented subjects aged ≥ 80 . Data were analyzed using generalized estimating equations and Cox survival analyses. The 2-year incidence of dementia (DSM-III-R criteria) was 6.9%. In the first model with predictors already known were analyzed, memory complaints and a MMSE score ≤ 25 resulted in a predictive value of 28.8%. In the second model in which also biomarkers were analyzed, the 8-year incidence was 15.0%. Low cholesterol and a MMSE score ≤ 24 resulted in a predictive value of 45.8%. Both classification models were a good replication of the classification models found in LASA, and may therefore be useful for the early identification of persons at risk for dementia in primary care.

AGE CHANGES IN DAILY STRESS PROCESSES: COORDINATED ANALYSES OF TWO MEASUREMENT BURST STUDIES

M. Sliwinski¹, D. Almeida¹, R.S. Stawski¹, J. Smyth², *1. Pennsylvania State University, University Park, Pennsylvania, 2. Syracuse University, Syracuse, New York*

There is little longitudinal information on aging-related changes in emotional responses to negative events. We will present coordinated analyses from two measurement burst studies that examined intraindividual change and variability in the within-person coupling of daily stress and negative affect. We will describe two sets of analyses. The first set of analyses examined how average reactivity to daily stress increased longitudinally, and how this increase was evident across most the adult lifespan. The second set of analyses examined the extent to which emotional reactivity to daily stress exhibited long-term temporal stability, and how this stability varied across the lifespan. Taken together, the present results emphasize the benefit of coordinated analyses of data from intensive measurement designs for understanding age-related changes in daily stress processes.

SESSION 815 (SYMPOSIUM)

CREATIVE ANTICIPATION/ANSWERS ON SOCIAL DEVELOPMENTS; LATE LIFE SOCIAL INTEGRATION AND LONELINESS

Chair: J. Gierveld, NIDI, The Hague, Netherlands, VU University, Amsterdam, Netherlands

Social integration is of pivotal importance in establishing older adults' health and well-being. Older generations who grew up with traditional family values, are now confronted with individualization and modernization, affecting the composition and functioning of their kin networks and the values that direct support between older and younger generations. In this symposium researchers address the following questions: Is social integration decreasing? Are older adults becoming lonelier or are they creatively anticipating and answering these developments? This symposium brings together researchers from various countries (Netherlands, Spain and the U.S.) to report about new patterns of social integration. (1) Over the adult life span the oldest people are most lonely but trends in social integration of older adults in the Netherlands over a period of 24 years showed no significant increases in loneliness. (2) Now that older adults confronted with widowhood and divorce are facing long periods of living alone, more older adults opt for new types of partner relationships via so called Living Apart and Together. Results from (qualitative) research in the Netherlands and (3) in the U.S. showed preferences for guaranteeing both independence and intimacy in the new partner relationship. (4) Research comparing older Spanish and Dutch adults showed differentiation in type but not in intensity of support exchanged between parents and adult children. Together these results show creative accommodation of older adults to social circumstances such as individualization and modernization.

OLD AND LONELY: A PERSISTENT MISCONCEPTION?

T. Van Tilburg¹, J. Gierveld^{2,1}, 1. Dept. of Sociology, VU University Amsterdam, Amsterdam, Netherlands, 2. NIDI, The Hague, Netherlands

People's social network reflects both changes in roles and personal properties associated with growing old and with earlier life stages. Adaptation of the network to the personal situation assumes that people of different ages has about an equal likelihood of becoming lonely. Data from three Dutch surveys (N = 1000; 7711; 5219) including people aged 18 years to 96 years are analyzed. Older people are more often lonely; however, the majority of the very old is not lonely. Older people are more willing to report their feelings of loneliness, but are not higher in social loneliness. The results indicate an increasing acceptance of loneliness by the oldest fitting with the stigma of old people as being lonely. Intervention should be focused on people's close relationships, and should address the issue of stigmatization of old people as being all lonely.

NETWORK CHARACTERISTICS, SUPPORT EXCHANGE AND LONELINESS AMONG SPANISH AND DUTCH OLDER ADULTS

M.M. Sanchez¹, J. Gierveld², J. Buz¹, 1. Universidad de Salamanca, Salamanca, Spain, 2. Netherlands Interdisciplinary Demographic Institute, Den Haag, Netherlands

This article uses comparable data from two samples of community-dwelling Spanish (N = 646) and Dutch older adults (N = 656). The aim of the study is to examine the prevalence and social determinants of loneliness in the two countries. The results show that more participants are lonely in Spain than in the Netherlands. Living with a partner and social network size are related to less loneliness in the two samples. However, differences are found in the composition of the social network and type of support exchanged. Having friends in the network is a predictor of less loneliness in Spain but not in the Netherlands. Moreover,

instrumental support is related to less loneliness in Spain and emotional support in the Netherlands. The results are discussed in the context of cultural differences in norms and values about social relationships and the meaning of intimacy and closeness in different countries.

LIVING APART AND TOGETHER AFTER WIDOWHOOD OR DIVORCE: GUARANTEEING INTIMACY AND INDEPENDENCE

J. Gierveld, 1. NIDI, Den Haag, Netherlands, 2. VU University, Amsterdam, Netherlands

This paper uses data of the Netherlands Kinship Panel Study, wave 1 and 2, and additionally qualitative data of persons in lat relationships to examine characteristics of lat relationships of older adults after widowhood or divorce. After 1990 the incidence of older adults in lat relationships as compared to adults without partners increased significantly. Lat relationships are most frequently seen among the cohorts aged 50 to 64; 15 per cent of those without a partner in the household are involved in a lat relationship. People in lat relationships live in their own household and during part of the week share living quarters and in doing so combine their preferences for independence and for intimacy. Feelings of social embedment largely depend on the continuing relationships with own kin and secondary on new relationships with kin from the partner's side.

LIVING APART AND TOGETHER: A UNIQUE SITE FOR THE EXAMINATION OF GENDER ROLES, AGING, AND SOCIAL INTEGRATION IN LATER LIFE

D. Brothers-Mcphail, Sociology and Gerontology, Miami University, Oxford, Ohio

The dominant understanding of gender roles tends to be functionalist in nature, focusing on how they change across the life course within the context of the performance of occupational and family roles. For older adults, understanding gender and aging is mostly within the context of long-term marriages, showing how in the empty nest phase, wives become more agentic and husbands become more communal. Living apart and together (or lat) relationships, however, are unique in that the lack of shared family roles and a common household involves partners negotiating and performing gender roles in new ways. This paper extends the understanding of gender roles in later-life by examining them within an emerging non-conventional relationship arrangement. Drawing on the experiences of older men and women in lat relationships, this paper uses themes from poststructuralism to theorize the role gender plays in the formation and experience of intimacy and independence in lat relationships.

SESSION 820 (SYMPOSIUM)

DISASTER EXPERIENCES OF OLDER ADULTS WITHIN THE CULTURAL CONTEXT

Chair: D. Shenk, Anthropology, University of North Carolina Charlotte, Charlotte, North Carolina

Discussant: S.B. Laditka, University of North Carolina at Charlotte — Public Health Sciences, Charlotte, North Carolina

The recent occurrences of natural disasters throughout the world have prompted communities to develop or revisit emergency readiness plans to address the needs of their more vulnerable members, including older adults. For such plans to be effective, it is important to understand the effects of disasters on older adults and how they are affected by, cope with and prepare for such experiences. Utilizing a lifecourse perspective, papers presented in this symposium will consider the experiences of and strategies for coping with a natural disaster by older adult survivors in Peru and the United States. The session includes two papers studying the experiences of older adult survivors of the 2007 earthquake in Peru and two examining the experiences of survivors of hurricanes Katrina and Rita in 2005. Each presentation considers the disaster experience.

rience in the context of a lifetime of choices within the cultural context. The first two papers are based on a study of older adult survivors of the August 2007 earthquake in Peru. Shenk et al examine the experiences of survivors within the cultural context of gender roles and family relationships and Ramos et al analyze the coping strategies used by these same survivors. Roberto, Yoshinori, and Henderson consider individual, family, and community issues and concerns in the aftermath of hurricane Katrina for older adults who had evacuated from the New Orleans area. Silva and Cherry focus on the effects of hurricanes Katrina and Rita on health and well-being of very old adults.

UNDERSTANDING DISASTERS WITHIN THE CULTURAL CONTEXT: THE EXPERIENCE OF OLDER ADULT SURVIVORS OF THE 2007 EARTHQUAKE IN PERU

D. Shenk¹, K.D. Kalaw¹, J.D. Mahon⁴, B.M. Ramos³, I. Tufan², 1. *University of North Carolina Charlotte, Gerontology Program, Charlotte, North Carolina*, 2. *Akdeniz University, Antalya, Turkey*, 3. *University of North Carolina Charlotte, Dept of Social Work, Charlotte, North Carolina*, 4. *AMIGOS Volunteer Association, Arequipa, Peru*

This paper examines the experiences of older adult survivors of the August 2007 earthquake in Peru within the cultural context of gender roles and family relationships. Peruvian society is based on strong gender roles that position women's roles within the home and family, while men are positioned within public spaces and the larger community. Peru is an impoverished country where the cultural myth remains strong that elders are cared for and receiving support within their families. Although many live with their families, many face old age with few personal resources or government support and are taken advantage of by their families. Semi-structured videotaped interviews were conducted with 24 adults, 60 years of age and older, who survived the August 2007 earthquake in Pisco, Peru. Their experience and adjustment to the disaster will be examined within the cultural context.

COPING AMONG OLDER ADULTS SURVIVORS OF THE 2007 EARTHQUAKE IN SOUTHERN PERU

B.M. Ramos¹, I. Tufan², D. Shenk³, J.D. Mahon⁴, 1. *University of North Carolina at Charlotte, Department of Social Work, Charlotte, North Carolina*, 2. *University of Akdeniz, Antalya, Turkey*, 3. *University of North Carolina at Charlotte, Department of Anthropology, Charlotte, North Carolina*, 4. *AMIGOS Volunteer Association, Arequipa, Peru*

Coping responses to a major natural disaster may vary qualitatively within specific contextual milieus. For older adults, individual and environmental factors such as life experience and culture differentially influence a survivor's appraisal of stressors and sanction the emotions and behaviors considered appropriate for coping. Using in-depth interviews, we explored coping strategies among older adults (N=24) who survived the major 2007 earthquake in Southern Peru. Participants were men (N=13) and women (N=11) ages 65-90, primarily married, and of low education. Survivors drew from their life-long experience, religion, and the cultural values of familism and collectivism for coping. The theme of resilience in the midst of great sadness, fear of the aftershocks, and little or no material resources permeated throughout. Quantitative research that further explores this line of inquiry with large samples is warranted. Implications for practice, policy, and international disaster preparedness education will be discussed.

REBUILDING A LIFE NOW GONE: CHALLENGES FACED BY OLDER ADULTS IN THE AFTERMATH OF HURRICANE KATRINA

K.A. Roberto¹, Y. Kamo², T.L. Henderson³, 1. *Center for Gerontology, Virginia Tech, Blacksburg, Virginia*, 2. *Louisiana State University, Baton Rouge, Louisiana*, 3. *Oklahoma State University, Stillwater, Oklahoma*

Older adults displaced by Hurricane Katrina (HK) faced many challenges during the evacuation process and in the months that followed.

We explored the effects of HK on the daily lives of older adults who relocated from the New Orleans area to the Baton Rouge area using written journal entries, photographs, and follow-up telephone interviews. The majority of the 27 participants were female (89%), Black (70%), and on average, 72 years of age. Results are presented in terms of three major themes that emerged from our analyses of 759 journal entries and 440 photographs: emotional health (positive and negative emotions), faith (prayer, church attendance, religious gratitude), and interactions with family, friends, and neighbors (support and assistance). The findings reveal the complexity of responses to HK and strategies used by older adults as they began to rebuild their lives, and point to interventions that could assist individuals and communities in this process.

THE EFFECTS OF HURRICANES KATRINA AND RITA ON HEALTH AND WELL-BEING IN LATE LIFE

J.L. Silva¹, K.E. Cherry², 1. *Drury University, Springfield, Missouri*, 2. *Psychology, Louisiana State University, Baton Rouge, Louisiana*

The occurrence of Hurricanes Katrina and Rita (HK/R) in the Gulf Coast region in 2005 resulted in a unique opportunity to examine the impact of a natural disaster on self-reported health, coping and psychosocial well-being in very old adults in the Louisiana Healthy Aging Study (LHAS). We retested LHAS participants age 45 to over 90 years for whom pre-disaster experimental testing was completed within an eight-month period prior to the storms. To document the richness and diversity of the participants' personal storm experiences, we included a qualitative assessment in the LHAS hurricane study that covered previous hurricane and flood experiences; emotional and cognitive reactions to HK/R, coping before and after the storms, and perceived silver lining/positive outcomes. Discussion will include those individuals who engaged in helping behaviors in order to cope with the destruction of the storms. Together, these data speak to adaptive coping, resiliency and well-being in late life.

SESSION 825 (POSTER)

FAMILY II

THE ROLE OF FAMILY LIVING ARRANGEMENT ON VASCULAR AND COGNITIVE HEALTH

A.M. Couto, A.J. Revell, *Department of Psychology, University of Massachusetts Dartmouth, North Dartmouth, Massachusetts*

The influence of family living arrangement (residing alone or with family) and perceived quality of interpersonal relations (those relationships deemed supportive) in predicting vascular and cognitive health was investigated. Mild cognitively impaired individuals with vascular disease have performed significantly worse on tasks assessing processing speed and attention, syntax comprehension, and working memory (Nordlund et al., 2007). Further, longitudinal research (Haberman, Cooper, Katona, & Livingston, 2009) has suggested that care recipients' cognitive impairment and health may be improved if the individual is allowed to remain at home longer with family caregivers. In our investigation of community-dwelling middle-aged and older adults (Mage=68.36, range 53-90 years), global cognitive status (MMSE = 25.26, range = 19-30), self-reported vascular health, and family living arrangement were assessed. Of those tested, 27 indicated having a history of vascular health issues (n=4 reported none). With respect to family living arrangement, 16 lived alone, 13 with family, and 2 with non-relatives. Results indicated no significant differences in performance on the MMSE for those between the ages of 53 to 68 and 69 to 90 years of age ($t = -.54, p = .59$). There were also no significant differences between persons with and without vascular health issues ($t = .83, p = .42$), or between those residing alone or with others ($t = .43, p = .67$). Additional testing on a larger sample will be necessary, in addition to multi-group analytic models on the levels of vascular risk severity and cognitive health among the three family living arrangement groups.

'ONLY TIME WILL TELL': CONSTRUCTING NARRATIVES ABOUT MARRIAGE, DISABILITY, AND FAMILY FOLLOWING SPINAL CORD INJURY

A.A. Bender, *Department of Sociology, Georgia State University, Atlanta, Georgia*

Most research on life transitions focuses on the expected transitions people experience over the course of their life, such as birth of a child and retirement. Fewer studies examine non-normative transitions. This project focuses on one non-normative transition, spinal cord injury (SCI), and how couples construct narratives following injury. SCI primarily impacts people during their early adult years with an average age at the time of injury of 38. At this age, many people are in the first decade of marriage, engaged in full-time employment, and transitioning into parenthood. Sustaining an SCI at any point in time is life altering, but it places unique challenges on younger couples who might be less established in their lives. This presentation focuses on the experiences of 15 couples who have recently faced an SCI. This project included in-depth interviews with each partner at one, three, and six months post-injury. Data were analyzed using Grounded Theory Methods, which were guided by Perspectives of the Life Course. This presentation focuses on how people conceptualize the present and future following traumatic injury. This study expands on LaRossa and Sinha's (2006) typology of narratives, which presents four directional narratives new parents use when discussing the transition to parenthood. By contrast, results from this project suggest there is an additional, fuzzy, narrative in use by patients and partners, which does not imply direction; rather, it implies ambiguity about the future. Following this session, participants will understand the narratives people construct about marriage, disability, and family following SCI.

RELATIONSHIP REGULATION IN THE TRANSITION TO FAMILY CAREGIVING IN MIDLIFE

M.K. Rohr, F.R. Lang, *Institut of Psychogerontology University Erlangen-Nuremberg, Erlangen, Germany*

How do age-related changes in personality, attitudes, cognition, and contextual aspects contribute to potential transitions into caregiving roles? What chances and challenges do potential caregivers anticipate when an older parent or a spouse is going to need care in near future? Which influence does the perceived urgency of potential care have on the evaluation of this transition? The current project explores the dynamic nature of transitions into a caregiving role and investigates the involved adaptive mechanisms of relationship regulation in a dyadic perspective. Preliminary results of an online study (N = 181) found small effects of demographic and personality characteristics on caregiving decisions. Further analyses will therefore focus on the role of relationship characteristics in approaching the subjective deadline of caregiving to older family member. Results are discussed with respect to models of developmental regulation and the process of goal-disengagement and re-engagement in midlife and late adulthood.

THE ATTITUDES OF THE YOUNGER AND OLDER GENERATIONS PRIOR TO AND AFTER AN INTERGENERATIONAL PROGRAM

M. Stone, *Case Western Reserve University, Cleveland, Ohio*

This study assesses older and younger adults' attitudes toward those of other ages and the ability of an intergenerational program to change the attitudes of younger and older adults. The contact hypothesis suggests that positive interaction, while meeting six criteria, may lead to positive attitude changes. Three intergenerational classes and a comparison group that is age-segregated are used to examine attitudes before and after the course. After participation in an intergenerational program, older adults exhibit significantly more positive attitudes toward younger adults than do younger adults about older adults. However, there is not a significant difference between pre- and post-test mean scores for those in the age-integrated and age-segregated courses. Qualitative observa-

tions suggest that a significant amount of positive intergenerational interaction occurs in the intergenerational courses, and are used to assess the context of the classes and to explain the findings.

AN EXAMINATION OF CAREGIVER DEPRESSIVE SYMPTOMS AND AMBIVALENCE FOLLOWING THE DEATH OF AN ELDER CARE RECIPIENT

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Many informal caregivers confront the death of an elderly care recipient. Caregivers are not unique in experiencing emotional and psychological strain following this event, but pre-death factors may complicate their responses. We conducted in-person interviews before and after a care recipient's death to assess caregiver adjustment. Both care-related and psychosocial variables were associated with individual differences in caregiver depressive symptoms (e.g., amount of care, care-related activity restriction, physical health, relationship history, depressive symptoms, and social support before the death predicted 39% of variance in post-death depression). Furthermore, evidence suggests that some caregivers experienced positive and negative emotional reactions simultaneously (i.e., both grief and relief), each associated with unique pre-transition factors and predictive of post-transition psychosocial adjustment. This research leads to further questions about the occurrence of emotional ambivalence following the death of a care recipient. Our research contributes uniquely to existing research on the prevalence and implications of ambivalence in caregiving and other family relationships. Strategies for conceptualizing and measuring ambivalence following death and other caregiving transitions are discussed.

HOW CAN WE FIGURE OUT WHETHER THE PAID CAREGIVERS ARE TRUSTED IN THE HOME-BASED CAREGIVING?

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To provide better in-home care for an ill or frail elder, family caregivers tend to seek paid caregivers to help or to substitute for their care provision. For family caregivers, finding trustworthy paid caregivers becomes a critical matter of concern for protecting the care receiver against potential risks to his or her safety, such as financial exploitation and intentional abuse by the paid caregivers. Although it has been argued that the relationship with the hired caregiver is a crucial determinant to the quality of in-home care, there are few studies about family caregivers' trustworthiness of the paid caregivers in the relationships. To explore how family caregivers figured out whether the paid caregivers for in-home care could be trusted, in-depth interview were conducted with nine family caregivers. This study found that family caregivers tried to reduce the vague risk of hiring someone and to find a new paid caregiver they could trust through obtaining trustworthy referral sources (e.g., friends, family members, and care agencies), getting trustworthy reputations of candidates from the trusted references, and assessing potential for the good caregiving relationships. After hiring a new caregiver, family caregivers still tried to discern whether the hired caregivers could be trusted through keeping an eye on them. Personal (e.g., competence and conscience), interpersonal (e.g., maintaining the good relationship with the care receiver), and contextual aspects (e.g., providing the qualified and secure physical environment) of the paid caregivers were crucial for family caregivers to enhance confidence in the trust of the hired home-care workers.

EXEMPLARY CARE AS A MEDIATOR OF THE EFFECTS OF DAILY CARE BOTHER AND CAREGIVER EMOTIONAL OUTCOMES

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Providing care to someone with dementia is extremely burdensome. Despite the experience of a burdensome situation caregivers report experiencing positive aspects of caregiving (PAC). The transactional model of stress has been applied to the caregiving situation to help explain what leads to positive and negative outcomes experienced by dementia caregivers. Daily Care Bother (DCB) and Exemplary Caregiving (EC) are new constructs that warrant further study within this model. Using the transactional model of stress, we examined the relation between caregiver subjective appraisal (DCB, Burden, and Behavioral Bother), Exemplary Caregiving, and caregiver emotional outcomes (Depression and PAC). Specifically, EC was examined as a possible mediator of the effects of caregiver subjective appraisal on emotional outcomes. Regression analyses revealed that, after controlling for caregiver demographics and care recipient cognitive impairment, EC partially mediated the relation between DCB and the emotional outcome variables. Caregivers with higher EC scores reported lower depression and higher PAC. Sobel test statistics were calculated and these indicated that the strength of the mediations were significant. Findings for burden and behavioral bother were insignificant. Caregivers' perception of providing exemplary care to individuals with dementia lessened the impact of DCB on caregivers' symptoms of depression and increased the probability that caregivers would experience higher PAC. These data support the use of the transactional model of stress and cognitive interventions for caregivers targeting perceptions of quality of care.

AN INTERVENTION FOR LATINO FAMILY CAREGIVERS OF ALZHEIMER'S PATIENTS: UNIQUE NEEDS AND RESEARCH GAPS

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Latinos are the fastest-growing subpopulation in the United States. By 2050 they are projected to account for 25% of the population. The number of older Latinos is expected to increase from 2 million in 2000 to over 13 million in 2050. Additionally, it is estimated that the number of Latinos suffering from Alzheimer's disease (AD) will increase from 200,000 to over 1.3 million by 2050. As a result the number of Latino family caregivers will also increase. Research has shown that caring for someone with AD is particularly burdensome for families, and Latinos have a unique set of needs. Latinos are at greater risk because of factors like increased prevalence of vascular dementia and genetic predisposition in several Latino subgroups. AD affects Latinos an average of seven years earlier than it does non-Latinos, and Latinos with AD tend to suffer from greater behavioral and cognitive impairment. Interventions are needed to assist Latino caregivers with the special challenges they face. As part of a larger two-year community-based study evaluating a caregiver intervention, 13 Latino caregivers, and their families, received an average of nine hours of clinical contact. Themes of the sessions were developed using content analysis of clinical notes and were compared and contrasted with one another and with the literature. This poster compares the caregiving literature with themes uncovered. Similarities and differences are explored in order to provide a deeper understanding of the unique factors, such as ethnicity, language, and immigration, involved in Latino family caregiving of Alzheimer's relatives.

PROCESS OF AMBIVALENT NORMALIZATION: EXPERIENCE OF FAMILY CAREGIVERS OF ELDERLY WITH MILD COGNITIVE IMPAIRMENT IN TAIWAN

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Aims. To conceptualise the caregiving process in Taiwan families caring for an elder with mild cognitive impairment. **Background.** Family caregivers play an essential role in the lives of elders with mild cognitive impairment by dealing with their cognitive status and daily function. Little is known, however, about the development of the caregiving trajectory, particularly in Asian countries. **Design.** Grounded theory methodology was used. Data were collected via in-depth interviews with 10 family caregivers of patients with mild cognitive impairment and living at home in northern Taiwan. Data were analysed by constant comparative analysis. **Results.** The process most used by family caregivers to adjust to conflicts and changes in relationships with elders with mild cognitive impairment was 'ambivalent normalisation'. This dynamic process included three components: subtle changes, optimistic appraisal, and ambivalent anticipation. Family caregivers who had developed this process were more likely to adopt multiple effective behavioural approaches to avoid conflict in their daily life and to begin outlining future caregiving tasks. **Conclusions.** The process of ambivalent normalisation can sensitise healthcare providers to family caregivers' needs and provide a basis for developing frameworks for future substantive theory and possible future research. **Relevance to clinical practice.** Interventions can be developed to facilitate family caregivers' awareness of the changes in their loved one in the initial stage of diagnosis and adopt multiple effective strategies to prevent conflicts in their lives. Healthcare providers can actively examine the cognitive function of older people in general outpatient departments, provide well-timed treatments, and minimise caregiver burden.

BIOMARKERS ASSOCIATED WITH STRESS AND METABOLIC SYNDROME IN OLDER CAREGIVERS AND NON-CAREGIVERS

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Psychoneuroendocrine theories propose that stress-induced neuroendocrine dysregulation may lead to metabolic syndrome, thereby increasing the risk of health decline. Thus, the interplay among stress, neuroendocrine biomarkers and metabolic syndrome may reveal how caregiving affects health. We investigated the cross-sectional associations between three biomarkers (cortisol and epinephrine from 24-hour urine, and plasma dehydroepiandrosterone-sulfate; DHEA-S), stress, and metabolic syndrome in preliminary data from 15 elderly dementia caregivers (CGs) and 90 non-caregivers (NCGs) living in the Boston metropolitan area. The sample's mean age was 75.6 years. CGs were more likely to be married (87% vs. 28%) and male (67% vs. 33%), but had the same prevalence of ATP-III- defined metabolic syndrome as NCGs (33% vs. 32%). CGs reported more stress: mean Perceived Stress Scale scores = 18.5 (+ 6.3) vs. 15.6 (+ 8.1) and 47% vs. 23% scored in the top sample-based quartile ($p=0.05$). More CGs than NCGs fell in the top tertile for cortisol (53% vs. 27%, $p=0.03$) and epinephrine (43% vs. 31%, $p=0.16$) and the lowest tertile for DHEA-S (67% vs. 28%, $p<0.01$). We found non-significant associations between higher stress and both metabolic syndrome (odds ratio, OR, = 1.5, 95% CI = 0.6-3.7) and dysregulation of the 3 neuroendocrine biomarkers (ORs from 1.3 to 2.5). Further, dysregulation in cortisol and epinephrine, but not DHEAS, showed non-significant associations with metabolic syndrome (ORs = 1.9, 1.8, and 0.6, respectively). Though limited by small numbers and few caregivers, these results suggest that psychoneuroendocrine

models of stress-induced metabolic syndrome may explain the caregiving-health decline relationship.

EMAIL QUESTIONS ASKED BY MALE AND FEMALE CAREGIVERS OF STROKE SURVIVORS

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Following rehabilitation after a stroke, many families must learn how to manage the survivor in the home, which raises questions for family members who often feel unprepared and overburdened. This secondary data analysis examined questions asked by caregivers who conversed via email as part of a web-based intervention. The subjects were caregivers of stroke survivors [n = 11 males; 25 females] from Ohio or Michigan who were enrolled in a one-year study on the experience of caring. The subjects were primarily white spouses and, on average, 54 years old. Narrative content analysis of 2,148 email messages posted to the discussion group or asked of the online nurse resulted in themes that were drawn to Friedemann's framework of systematic organization. Socializing with a group [Theme 1], coherence in Friedemann's terms, emerged from the data for all subjects as they reached out to one another. Asking questions about medical care [Theme 2], system maintenance, also emerged as a theme for all subjects. Female caregivers' themes of validating their caregiving efforts [Theme 3], coherence, and dealing with change [Theme 4], system maintenance, emanated. The male caregivers' only theme of giving advice [Theme 5], system maintenance, also evolved. Although male and female caregivers asked different questions, both groups were doing everything in their power to preserve their lives and family system. They also needed more information and wanted to share helpful information with others. Healthcare professionals can use these themes as topics for educational interventions with caregivers either in a face-to-face or web-based format.

RELIABILITY AND UTILITY OF A NEW MEASURE TO ASSESS READINESS TO CHANGE IN DEMENTIA CAREGIVERS

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Numerous interventions have been developed to alleviate the negative effects of caregiving for individuals with dementia. Readiness to change is a construct that may be useful in examining caregivers' investment in interventions. Readiness to change was assessed using a newly designed questionnaire for dementia caregivers adapted from previous measures (McConaughy et al., 1983), the Stages of Change – Dementia and Memory Loss. Each of the five subscales showed excellent reliability (Cronbach's alpha ranged from .70 – .84.) in a sample of 58 caregivers who were seeking to be enrolled in a psychoeducational intervention (Judge, 2007). Participants were then classified into one of the five stages of change based on subscale scores. Results indicated that none of the caregivers were classified into the Precontemplation stage of change. Participants clustered in the latter stages of change, with the majority of participants indicating readiness to change caregiving behaviors: Contemplation (n = 7), Preparation (n = 15), Action (n = 20), and Maintenance (n = 16). Results suggest that readiness to change is a reliable and valid construct among dementia caregivers. These findings show that caregivers differ from substance abuse samples on readiness to change because no participants were classified into the Precontemplation stage, and the majority of participants indicated a willingness to change caregiving behaviors. It is recommended that interventions focus on presenting specific caregiving skills to capitalize on this readiness (Prochaska, DiClemente, & Norcross, 1992). Future research should examine readiness to change as it relates to psychosocial outcomes of interventions among dementia caregivers.

GRANDCHILDREN AND GRANDMOTHERS' CAREGIVING: SUPPORT, RESOURCEFULNESS, FAMILY LIFE, AND DEPRESSIVE SYMPTOMS

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Although there has been much attention to grandmothers as caregivers to grandchildren (grandmothers raising grandchildren, grandmothers in multigenerational homes and non-co-resident grandmothers), there has been less attention to the grandchildren in these different family structures. Using McCubbin's Model of Family Stress and Adaptation as a framework, this study examined depressive symptoms, support and perceptions of family life in 145 Ohio grandchildren (age 8-19) whose grandmothers were participating in a larger study of caregiving to grandchildren, well-being and health. After appropriate assent and consent were obtained, grandchildren completed a survey packet that measured resourcefulness (Children's Resourcefulness Scale, Zauszniewski), subjective and instrumental support (Duke Social Support Index), family functioning (McMaster Family Assessment Device), parental/guardian monitoring (Parental Monitoring Scale, Singer), importance of religion, and depressive symptoms (CES-D, Radloff). Analysis included descriptive statistics, reliability analysis, correlations and analysis of variance. Measures showed good reliability. Results of correlation analysis indicate that higher resourcefulness was associated with fewer depressive symptoms, more subjective support and better perceptions of family functioning. Grandchildren who reported more depressive symptoms also reported less subjective support, perceptions of worse family functioning and less parental/guardian monitoring. Participants who reported the most parental/guardian monitoring also reported more instrumental support and a greater importance of religion in their lives. Differences between grandchildren in the three different family structures were limited to support received and given to their grandmother. The inter-relationships among the variables of parental/guardian monitoring, family functioning, support, and depressive symptoms will be discussed within the context of family structure and overall family dynamics.

AN EXPLORATION OF CULTURAL TOURISM AND INTERGENERATIONAL RELATIONSHIPS AMONG THE MAASAI OF TANZANIA

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Besides social, economic, and environmental impacts, tourism has been shown to have important effects on intergenerational relationships and community well-being in developing countries. This project examines the impact of tourism on intergenerational relationships and community well-being among the Masaai in the Ngorongoro Conservation Area (NCA) of Tanzania, an indigenous community residing in a popular, nature-based tourism destination. The principal method employed in this study will be focus groups in which the researchers will explore how community members define well-being and intergenerational An exploration of Cultural Tourism and Intergenerational Relationships among the Masaai of Tanzania relationships as well as the relationship of tourism to these two factors. Data collection will occur within two villages located in NCA, namely Oloirobi and Irmsigio. Examining the intergenerational relationships among the Masaai community will require an understanding of the gender-based age grading system which is unique to their ethnic group. Unlike occidental societies which tend to define generations based on age, the Masaai draw on cultural ceremonies and natural events to differentiate between, for instance, adolescence, adulthood and late adulthood. A feasibility study was conducted in October 2008 to ensure the viability of the proposed project. This presentation will seek to describe the age-graded societal structure

amongst the Maasai, identify the factors that influence community well-being in this region, and ascertain how heritage tourism is perceived by different age groups in this region. Findings from this study carry the potential to influence our understanding of intergenerational relationships in other indigenous contexts.

EXPLORING AGE RELATED DIFFERENCES FOUND IN FEMALE AFRICAN AMERICANS VIEWS OF POSITIVE FATHERHOOD

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This investigation explored age related differences in the concept of African American (Black) Fatherhood from the perspective of black females. It also sought to explore their perception of the “positive” pedagogy black males utilize in fathering. Participants were composed of two groups of African American females, with the first group ranging, in age, from 18 to 25 years, and the second group ranging, in age, from 55 to 90 years old. Subjects were given a battery of tests, including the Rosenberg Self-Esteem Scale, the Multidimensional Inventory of Black Identity, and the Positive Fatherhood Demographics Sheet, and were then asked to list as many “positive” things as they could about Black Fathers. An analysis of the data shows both quantitative and qualitative differences in the number and types of positive descriptors reported by females, depending on self-esteem scores, MIBI scores, and age.

RELATIONSHIP QUALITY IN LIVING APART AND TOGETHER RELATIONSHIPS (LAT)

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Research on the quality and dynamics of later life intimate relationships has largely been limited to marital relationships. However, a growing number of older adults are experiencing alternative types of intimate partnerships in later life, such as “living apart and together” (or LAT) relationships. LAT relationships, generally defined as committed relationships in which the partners maintain separate residences, are a growing trend among older adults in the U.S. However, we have little information on factors associated with relationship quality in these types of unions. We use data from the third wave of the National Survey of Families and Households (NSFH) to examine a sample of adults aged 50 and over who indicate they are currently unmarried but in a steady relationship. We use OLS regression models to examine correlates of relationship satisfaction (including sociodemographic factors, attitudinal factors, and anticipated relationship outcomes) among those currently in LAT relationships as well as to explore gender differences in relationship quality.

THE POSITIVE AND NEGATIVE APPRAISALS OF CAREGIVING ARE DIFFERENT CONSTRUCTS

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The literature suggests that caregivers are able to appraise caregiving experiences as both very rewarding and very burdensome. Furthermore, there are data showing the absence of correlations between appraisals of gain and appraisals of strain or burden. These data, and others, suggest that gain and burden are separate constructs. Our study aimed at confirming these findings using two large datasets, the Resources for Enhancing Alzheimer's Caregiver Health (REACH) and the Canadian Study of Health and Aging (CSHA). We used three approaches: 1) we correlated indices of gain with indices of strain, 2) we calculated the proportion of participants who reported divergence (e.g., high gain and high strain), and 3) we examined the predictors of gain and strain. We found a weak correlation between gain and strain in the REACH data ($r(783) = -0.237, p < 0.01$), and none in the CSHA

data ($r(576) = -0.034, p = .452$). Using pre-determined cut-off values, we found that 18.4% of REACH participants had low positive and low negative appraisal and 25.1% had high positive and high negative appraisal. For the CSHA these proportions were respectively 33.6% and 7.2%. Finally, the models predicting gain and strain differed, for both datasets. These data confirm that gain and strain are separate constructs. A better understanding of each construct may support the development of interventions to maximize the positive aspects of caregiving and to minimize its negative influences.

DEVELOPING AN ACTION GUIDE TO ASSIST WITH MOVING CAREGIVING INTERVENTIONS INTO PRACTICE

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An estimated 21% of households in the United States are impacted by caregiving responsibilities. According to a national survey, more than half (53%) of all caregivers feel that their health has gotten worse due to caregiving responsibilities and that this has affected their ability to provide care for the care recipient. An emphasis within the caregiving and public health communities has been placed on establishing and sustaining strategies for moving effective evidence-based caregiving interventions into widespread practice and ultimately promoting the health and well-being of our nation's caregivers. The goal of this session is to describe the development of a tool, referred to as an “Action Guide,” designed to assist organizations in implementing caregiver programs. The first component of this session will focus on identifying and addressing strategies associated with implementing the REACH OUT intervention, formerly known as Alabama's REACH Demonstration Project. REACH OUT will be used to illustrate important questions and challenges inherent in translating evidence-based research into practice in the “real-world.” REACH OUT has been successfully implemented in Alabama as a state-wide program and in several other settings, while holding promise for additional widespread implementation. The second component will focus on identifying the steps necessary in planning and preparing an organization for delivering of a caregiving intervention, detailed in the Action Guide. Attendees will learn how this intervention's implementation can be facilitated with the methodical approach presented within the Action Guide for use within their organization.

FACTORS ASSOCIATED WITH USE OF COMMUNITY-BASED SERVICES BY LATINA AND CAUCASIAN DEMENTIA CAREGIVERS

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Considerable concern exists regarding available caregiver support programs and services and to which extent they are used by diverse family caregivers of people with Alzheimer's disease (AD) and related dementia disorders. The majority of literature focusing on dementia caregivers has not adequately identified specific cultural factors that may contribute to an individual's caregiving experience. This study attempts an examination of cultural factors related to dementia care among female Latino and Caucasian caregivers. We examine the influence of factors such as the caregivers' self-efficacy beliefs, and use of supportive coping strategies on the health behavior of the caregivers, in particular the use of community-based services for older adults. Data were taken from interviews with 96 Caucasian, and 89 Latino caregivers enrolled in a program to evaluate a psycho-educational intervention program in the San Francisco Bay area. Logistic Regression was performed to assess the influence of self-efficacy and supportive coping strategies in predicting the use of community-based services, in particular, assistance with homemaker related to activities of daily living, use of transportation services, and participation in a senior day care and health programs. On the bases of the estimates for each type of service, it

appears that both, the caregiver's self-efficacy and supportive coping strategies contribute to a higher likelihood of service use, in the presence of relevant predisposing, enabling and need factors. Ethnicity is a relevant factor with Latinas having a greater likelihood to use transportation services and participating in a senior day care and health program than Caucasian caregivers.

EXTENDING THE ACTIVITY RESTRICTION MODEL OF DEPRESSED AFFECT TO INCLUDE QUALITY OF INFORMAL CARE

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The Activity Restriction Model of Depressed Affect (ARMDA) posits that stress predicts depression largely to the extent that stressors lead to increased restriction of normal activities. The purpose of the present study was to test the ARMDA in a sample of informal caregivers. Moreover, the model was extended to include how depression might be related to quality of informal care outcomes (i.e., caregiver respect and potentially harmful behavior [PHB]). Using data from 310 informal caregivers, the following hypotheses were tested: (a) activity restriction completely mediates the relation between the amount of care caregivers provide and depression, (b) caregiver depression leads to decreased respect and increased PHB, and (c) decreased respect predicts increased PHB. Path analysis using disturbance term regression tests examined the magnitude of hypothesized and omitted paths in the proposed model. The results provide support for the ARMDA and suggest that interventions aimed at improving caregiver depression (and thus the quality of care provided) should focus on ways to decrease activity restriction.

EQUITY OF INSTRUMENTAL AND EMOTIONAL SUPPORT EXCHANGES AND PARENT-ADULT CHILD CLOSENESS: THE EFFECTS OF PERCEPTIONS OR REALITY?

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Exchanges between the generations have been a central focus of research on parent-adult child relations for several decades. This work has focused primarily on describing and explaining parents' and children's reports of support given and received, and the role that such exchanges play in intergenerational relationship quality. There has been much less attention to the role of perceptions of equity of exchanges in explaining the quality of parent-child relations; further, it is not known whether perceptions of equity reflect reports of exchanges between intergenerational role partners. In the present paper, we address whether: a) mothers' perceptions of equity in their relationship with each of their adult children are consistent with their actual reports of emotional and instrumental support exchanges; and b) whether relationship quality is better-predicted by perceptions of equity or by actual support exchanged. To examine these questions I will be using data from 774 mother-child dyads nested within 300 later life families collected as part of the Within-Family Differences Study.

USE OF MUTUALITY SCALE WITH MEXICAN AMERICAN FAMILY CAREGIVERS OF OLDER ADULTS

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This study builds on pilot work to probe the strength of cultural equivalences by field testing the Mutuality Scale for use with Mexican Americans (Usted y su ser querido). Although older Mexican Americans often depend on their family for care, we have no standard quantitative instrument against which to scale this motive for filial obligation. We used a non-experimental methodological design to test the psychometric properties of the Mutuality Scale employed with Mexican Americans. A purposive sample of 193 Mexican American adult family caregivers of older relatives was recruited in El Paso from October 2007 to January 2008 to complete a brief demographic survey and the bilingual Mutuality Scale. Using principal axis factoring (orthogonal rotation), a two-fac-

tor structure emerged, which accounted for 50% of the variance in total scores. We were targeting the Interaction between the Caregiving Dyad (7 items) and Reaction from the Care Recipient (4 items) (Cronbach's alpha was .88 and .81, respectively). Test-retest reliability across a 3-week interval was $r = .88$ and $.90$ (intraclass correlation). While use of the Mutuality Scale with Mexican American caregivers requires further study, it shows potential in measuring the motive set for elder care, which in turn may be useful in designing a culturally relevant intervention for family caregiving in this population.

FAMILIES LIVING WITH LUNG CANCER: INCONGRUENT PERCEPTIONS OF SYMPTOMS & FUNCTION

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Lung cancer will contribute 15% of all new cancer cases and 29% of all cancer deaths in the United States. More people will die of lung cancer than colon, breast, and prostate combined. Approximately 58% of lung cancer patients (PTs) die within 1 year of diagnosis with a 5-year survival rate of 16%. Lung cancer PTs are more likely to have symptoms, such as pain, fatigue, and shortness of breath at the time of diagnosis than PTs with other common cancers. PTs and family members (FMs) struggle to manage symptoms, based on individual perceptions. Incongruent symptom perceptions can lead to poor symptom management, unnecessary PT suffering, and in some cases life-threatening complications. The primary goal of the study was to examine PT-FM incongruence in perceptions of PT physical function, pain, fatigue and shortness-of-breath and describe variables that predict incongruence. Using multilevel modeling, preliminary baseline Level 1 data on 57 family care dyads revealed that FMs, on average, rated PT fatigue and function significantly higher than PTs, whereas incongruence was not significantly different from zero, on average, for shortness-of-breath and pain interference. However, there was significant variability around the average for all four variables ($p < .001$). Level 2 models found PT depression, FM role overload, being a spouse, and the PT feeling listened to explained 15-36% of how high the dyad rated each symptom and between 5-31% of the incongruence between PT and FM. Findings will be discussed in regard to roles of PT depression, FM overload, and communication-based interventions.

EXPERIENCES OF BURDEN, DEPRESSION, AND UPLIFTS ACROSS THE CAREGIVING JOURNEY: DOES RELATIONSHIP MATTER?

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The caregiving journey begins within the historical context of an established familial relationship identity between the caregiver and family member with a chronic illness. The progression of the caregiving journey has been measured using intensity of care tasks or length of caregiving but those measures do not account for the variability in the caregiving experience. Care tasks do not necessarily become more intense over the length of the caregiving journey. Caregiver identity theory suggests as the journey progresses, individuals incorporate more of the caregiver role into their relationship identity. Using relationship identity to measure the phases of the caregiving journey, this study investigated whether experiences of burden, depression, and uplifts differed across the caregiving journey and between spouse ($N = 261$) and adult-child ($N = 232$) caregivers. Statistical tests using multivariate analyses of variance revealed interactions between relationship to care-recipient and caregiving phase for burden and depression, and a main effect of caregiver relationship for uplifts. As spouse caregivers incorporated more of the caregiver role into their relationship identity, they experienced a gradual increase in burden and depression. Adult-child caregivers, however, experienced the most burden and depression when the familial and caregiver roles equally comprised their relationship identity. While adult-children experienced similar levels of uplifts across the

caregiving journey, spouses experienced lower levels of uplifts. Findings are discussed in terms of the different needs spouses and adult-children have across the caregiving journey.

COPING MECHANISMS OF RESILIENT CAREGIVERS IN A NON-CLINICAL SAMPLE

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Research on dementia caregivers often includes caregivers sampled from clinical settings. The current analyses use data from a representative sample of caregivers residing in Cache County, northern Utah. Prior caregiving research has operationalized "resiliency" as having high well-being in the face of caregiving challenges. The current study observed 260 caregivers (80% female, 69% with at least some college education, and 90% married). These caregivers were categorized into four groups, based on higher or lower Beck Depression Inventory scores and higher or lower caregiving challenge, measured here as care recipients level of impairment in activities of daily living (ADL). The resilient caregiver group (low in depression but high in exposure to ADL impairment, $N = 69$) were compared to the non-resilient caregiver group (higher in depression, but lower in exposure to ADL impairment, $N = 68$). Resilient caregivers did not differ from non-resilient caregivers in terms of demographic variables, but did differ in their reported usage of certain coping mechanisms. T-tests indicated that, on average, the non-resilient caregivers used more avoidance strategies ($p < .05$), more wishful thinking strategies ($p < .05$), and less social support-seeking coping strategies ($p < .05$). There was also a trend where non-resilient caregivers were more likely to blame others. Whether these findings can be used to prevent or relieve emotional distress in carers will require prospective trials.

UNDERSTANDING THE RELATIONSHIP BETWEEN AGE AND THE POSITIVE AND NEGATIVE OUTCOMES OF DAUGHTERS CAREGIVING FOR WOMEN WITH BREAST AND OVARIAN CANCER

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The study investigated the relationship between age of an adult daughter caregiving for a biological mother with a potentially inherited female cancer (breast or ovarian cancer) and the positive and negative outcomes of the caregiving role (i.e., depression, perceived physical health, caregiver burden, and posttraumatic growth). The study investigated the mediating roles of social support and coping behavior. Women over age 18 who had been in the caregiving role within the past five years completed a set of questionnaires. Data is currently being collected. Of the 30 participants who have completed the survey ($M_{age} = 36$, $R_{age} = 18-56$), 72% provided support for a mother diagnosed with breast cancer and 28% for a mother with ovarian cancer. Preliminary results indicated 90% of the caregivers were concerned that their mother's cancer might be genetic. While it is known that the caregiving role is stressful (i.e., all of the participants displayed depressed affect), the caregiver role also encompasses positive benefits. For instance, 90% of participants were experiencing significant levels of posttraumatic growth, indicating that adult daughters were growing and changing as an outcome of their caregiving experience. Upon study completion, multiple regressions will be run to assess the relationship of caregiver age with positive and negative caregiver outcomes. It is expected that young adult daughters will experience the caregiving role more intensely than their older counterparts. Study applications related to the availability of age-appropriate caregiving resources for female adult caregivers of a mother with a potentially genetic female cancer will be discussed.

SESSION 830 (SYMPOSIUM)

GROWING OLD GRACEFULLY: WEATHERING THE PSYCHOLOGICAL VICISSITUDES OF AGING

Chair: N. Newton, *psychology, University of Michigan, Ann Arbor, Michigan*

Discussant: J. Smith, *psychology, University of Michigan, Ann Arbor, Michigan*

Lifespan research indicates myriad ways in which middle-aged and older adults adapt to the realities of aging (Baltes & Smith, 2004). The maintenance of well-being in the face of advancing age has been variously linked to the experience of regret (Dijkstra & Barelds, 2008; Jokisaari, 2004); facets of personality (Stewart, Ostrove, & Helson, 2001); self-regulation (Wrosch & Freund, 2001); and future orientation (Smith & Freund, 2002; Wrosch, Bauer, & Scheier, 2005). The goal of this symposium is to present new cross-sectional and longitudinal findings about adaptation and successful aging, with an emphasis on how regrets, age concerns, future perceptions, and resilience relate to well-being and longevity across the adult lifespan. Nicky Newton examines themes of regret and how they affect well-being in three cohorts of women (aged 20s, 40s, and 60s). Using longitudinal data spanning the entire period of middle age (40s to 60s), Shellae Versey evaluates the role of psychological empowerment, feelings about aging, and personality development as predictors of successful aging, as defined by Rowe and Kahn (1987). Maja Wiest explores the association between resilience and longevity in response to widowhood in old age. Dana Kotter-Gruehn examines how optimistic individuals envisage the future and how such future perceptions are related to changes in well-being and objective nearness to death in older adults aged 70 to 100+. Together, these papers will be discussed with respect to how middle-aged and older adults can experience aging as a period of development.

REGRET THROUGH THE AGES: MISSED OPPORTUNITIES, EXTERNAL RESTRICTIONS, AND WELL-BEING

N. Newton¹, C. Torges², A. Stewart³, 1. *University of Michigan, Ann Arbor, Michigan*, 2. *North Dakota State University, Fargo, North Dakota*, 3. *University of Michigan, Ann Arbor, Michigan*

According to Butler (1974), life reviews allow older people to reflect on and address their regrets. Other researchers have found that reviews can take place at other times in adulthood (Stewart and Vandewater, 1999; Wrosch and Heckhausen, 2002). Acknowledging regrets can lead to lower overall well-being (Torges & Stewart, 2005); however, there are cohort differences in the responses elicited by questions about missed opportunities (Lecci, Okun, & Karoly, 1994). In the current study we found differences in three cohorts of women (aged 20s, 40s, and 60s) concerning regret themes: older cohorts more often mentioned external restrictions and missed career opportunities, whereas the youngest cohort more often mentioned that possibilities remain for the future. Moreover, restrictions and career issues related to lower well-being for the younger cohorts. These results suggest that developmental and social change may both be pertinent to women's experience of regret.

ADAPTATION TO WIDOWHOOD AS AN INDICATOR OF RESILIENCE AND ITS IMPACT ON MORTALITY

M. Wiest, B. Schüz, S. Wurm, C. Tesch-Roemer, *German Centre of Gerontology, Berlin, Germany*

The concept of resilience describes the sum of individual resources to cope with adverse events and adapt to critical life events. It is assumed that resilience affects long-term survival. Individual differences in resilience should thus be related to differential mortality. This study examines individual differences in resilience by examining differential adaptation to a common critical life event in later life, namely bereavement. In this study, a sample of 798 bereaved individuals from the German Socio-Economic Panel (GSOEP) is analyzed. With yearly assessments over 24 years, the GSOEP allows analyzing the impact of

bereavement on well-being and the adaption processes following the event. Preliminary analyses show substantial individual differences in trajectories of life satisfaction prior and after the loss of the spouse (variance component=1.626, SD=0.094, $p<.001$). Further analyses will identify latent trajectory classes of adaptation and examine their differential predictive power for mortality and longevity.

WHEN TIME IS RUNNING OUT: FUTURE ORIENTATION AND SUBJECTIVE NEARNESS TO DEATH IN VERY OLD AGE

D. Kotter-Gruehn, D. Gruehn, *Department of Psychology, North Carolina State University, Raleigh, North Carolina*

How optimistic older adults perceive their future is an important indicator of self-regulation and resilience. Using 12-year longitudinal data from the Berlin Aging Study (Baltes & Mayer, 1999) with 516 adults aged 70 to 104 years, we examined (a) how three indicators of future perception (future orientation, optimism, subjective nearness to death) change in very old age; (b) whether changes in future perception are related to changes in well-being; and (c) whether a subjectively limited future perception is related to objective nearness to death over time? With advancing age, participants reported fewer future plans, less optimism, and an increasing subjective nearness to death. These changes were related to changes in subjective well-being. Furthermore, positive future perceptions predicted longer survival times. Results suggest that older adults seem to have quite accurate perceptions of their remaining time and adjust their expectations accordingly.

PREDICTORS OF SUCCESSFUL AGING

H. Versey, A. Stewart, *University of Michigan, Ann Arbor, Michigan*

Successful aging contextualizes the positive lived experiences of older adults. Rowe and Kahn (1987) propose that successful aging is indicated by positive physical, mental and emotional health and well-being. Research currently aims to determine associations between aging well and disability. However, little is known about how elements of personality, emotional and social development in later life may be related to successful aging. Using longitudinal data, this study explores correlates and predictors of successful aging in two samples of college-educated women in their early sixties. This research examines the quality of life for women in late midlife, and evaluates the role of personality and developmental factors that reflect psychological maturity as predictors of successful aging. Predictors include psychological empowerment, feelings about aging, and personality development from an Eriksonian perspective. Together, these predictors provide insight into mind-body relationships that should be considered when evaluating associations between health and aging.

SESSION 835 (SYMPOSIUM)

INTERPERSONAL EFFECTS OF SUFFERING: CONCEPTS, MEASURES, AND OUTCOMES

Chair: R. Schulz, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Discussant: J. Heckhausen, *University of California, Irvine, California*

In close personal relationships the suffering of one individual has significant impact on the health and well-being of the other. Using family caregiving as a context, we show that patient suffering is a unique and powerful stressor that affects the physical and psychological well-being of the caregiver. The first two presentations provide a definition of suffering and new measures for assessing the experience of suffering and the perception of suffering in others (i.e., suffering from first and third person perspectives). Comparative data for whites, Hispanics, and African Americans are presented. The effects of patient suffering on caregivers are presented in two studies, one describing the impact of patient suffering on caregivers of patients undergoing depression treatment, and the other assessing the impact of patient suffering on caregivers of patients with dementia, using both perceived suffering and patient self-reported suffering as predictors. Finally, in a laboratory study

we show how watching and thinking about your partner suffering increases physiological reactivity in the form of increased blood pressure and heart rate. Current health and social policy focused on family caregiving emphasize the challenges of providing care to a loved one as a major source of distress among family members. Equal emphasis should be placed on minimizing or eliminating the suffering of the patient and developing intervention strategies that facilitate caregivers ability to cope with the suffering of their relative.

THE IMPACT OF PATIENT SUFFERING ON SYMPTOMS OF DISTRESS IN MINORITY FAMILY CAREGIVERS

S. Czaja¹, R. Schulz², D. Perdomo¹, 1. *University of Miami Miller School of Medicine, Miami, Florida*, 2. *University of Pittsburgh, Pittsburgh, Pennsylvania*

Evidence has shown that caring for a relative/friend with an illness or disability causes distress in family caregivers and compromises their health and survival. These outcomes have been linked to the patient's physical disability, cognitive impairment, disruptive behaviors, and caregiving demands. Little attention has been given to how patient suffering influences caregiver distress. We examined the role of perceived patient suffering on caregiver outcomes among a sample of Black/African American (N=45) and Hispanic (N=55) family caregivers of patients with dementia participating in a caregiver intervention trial. We found that for both groups, feelings of compassion towards the patient increase with the caregivers' perception that the patient is experiencing negative physical symptoms and distress from these symptoms. Although the Black/African Americans report less burden; for both ethnic groups, patient symptoms of physical and psychological suffering are linked to caregiver depression and burden. These findings are discussed in terms of caregiver interventions.

CAREGIVING SPOUSES' CARDIOVASCULAR REACTIVITY TO PERCEIVED SUFFERING

J. Monin, R. Schulz, L.M. Martire, J. Jennings, J. Lingler, M.S. Greenberg, *University of Pittsburgh, Pittsburgh, Pennsylvania*

To examine the unique influence of perceptions of suffering on caregivers' risk for impaired psychological and physical health, a laboratory study of older adults with osteoarthritis and their spouses was conducted. Spouses' blood pressure (BP) and heart rate (HR) were monitored during two tasks designed to capture their partners' suffering. First, spouses watched their partner (and a stranger) carry heavy logs across an 8 ft space for 3 minutes, a task that elicited pain expression. Second, spouses gave a speech about their partner's suffering (and also about a typical meal with the partner). Results showed that spouses' BP and HR increased when watching and thinking about their partners' suffering, and exposure to a partners' suffering was more physiologically stressful than to a stranger's suffering. These findings suggest that heightened physiological stress caused by perceptions of a loved one's suffering may be one pathway to caregivers' increased risk for cardiovascular disease.

REDUCING PATIENT SUFFERING ALLEVIATES FAMILY CAREGIVER BURDEN

L.M. Martire, R. Schulz, C.F. Reynolds, *Psychiatry, University of Pittsburgh, Pittsburgh, Pennsylvania*

Depression is a hallmark of suffering and care recipient depression has been consistently linked to adverse health outcomes in caregivers. It follows that successful treatment of depression should decrease caregiver burden. In a study of older patients treated for major depression (N = 244) we show that short term improvement (Phase I) in patient depression is associated with a reduction in depression-specific burden ($\beta = -.24$, $p = .001$) and a trend toward improvement in general caregiver burden ($\beta = -.08$, $p = .08$). Caregivers of patients whose depression remitted during Phase II of the treatment study experienced further improvement in depression-specific burden, whereas caregivers of patients who did not remit showed no change in this outcome ($F = 4.59$,

$p = .04$). Findings inform our conceptual model of patient suffering and caregiver health.

CAREGIVER-PERCEIVED AND PATIENT-REPORTED SUFFERING AS PREDICTORS OF DEPRESSION SYMPTOMS IN DEMENTIA CAREGIVERS

S. Beach, R. Schulz, B. Zdaniuk, A. Dodds, *University of Pittsburgh, Pittsburgh, Pennsylvania*

This paper explores relationships between dementia patient suffering and caregiver depression using data from 84 caregiver-patient dyads (patient MMSE 15+). Patient suffering (physical, psychological, and spiritual/existential suffering) is assessed both by caregiver perceptions, and patient self-reports. Regression models controlling for caregiver demographics, patient IADL/ADL disability, patient memory/behavior problems, and caregiver health co-morbidities showed that caregiver perceptions of patient suffering were independent predictors of caregiver depression symptoms, assessed by the CESD. Patient self-reports of suffering did not predict caregiver depression, once the covariates were controlled. Significant effects were found for caregiver perceptions of patient psychological and spiritual/existential suffering, but not patient physical suffering. The role of caregiver beliefs about whether they can help reduce the patients suffering is also explored. Preliminary results suggest that among those who don't believe they can help reduce patient suffering, correlations between perceived psychological and spiritual/existential suffering and depression were reduced.

SESSION 840 (SYMPOSIUM)

NEW FRONTIERS IN RESILIENCE AND HEALTHY LONGEVITY: LONGITUDINAL STUDIES OF PROTECTIVE FACTORS

Chair: P. Fry, *Trinity Western University, Langley, B.C. V2Y 1Y1, British Columbia, Canada*

Discussant: P. Martin, *Iowa State University, Ames, 50011, Iowa*

Studies of resilience, well-being and healthy longevity have hitherto focused almost exclusively on youth rather than adults. Increased life expectancy without the compression of morbidity and stress has highlighted the need for greater attention to the capacity for resilient aging and healthy longevity during the later years of adulthood. The symposium will highlight the emerging scholarship of young and enthusiastic researchers on resilience, healthy longevity, and risks to mortality. Past formulations of resilience and longevity in the context of aging have treated the issues as primarily homeostatic, emphasizing the significance of select socio-demographic variables of age, disability, health status and income etc. as influential factors related to well-being, longevity and risks to mortality. In contrast, presenters in this symposium will draw attention to a number of other intriguing psychological influences, mechanisms and processes that contribute on a long-term basis to aging individuals' resilience, healthy longevity and to mortality risks. Together the findings from four longitudinal studies will reveal how, throughout adulthood, and especially in the later years, personality traits, marital happiness, occupational-personality congruence, and psychosocial resources of spirituality, family stability, social engagement, and commitment to life tasks, influence healthy aging and longevity both directly and indirectly. The role of control and challenge as trait factors will be discussed. Possible explanations for the predictive influences as revealed in longitudinal studies will be explored in depth.

OCCUPATION-PERSONALITY CONGRUENCE AND MORTALITY RISK IN AGING ADULTS

L.R. Martin^{1,2}, K.M. Clark², H.S. Friedman², M.L. Kern², 1. *Psychology, La Sierra University, Riverside, California*, 2. *University of California, Riverside, California*

Young adults are often encouraged to find careers that "match" their personalities, with important later-life outcomes hypothesized to depend on individual factors (e.g., personality), situational factors (e.g., occupation), and the congruence between them. Using an archival prospective cohort design, this study examined 551 men from the Terman Life Cycle Study to investigate the relationship of such congruence to mortality risk. Five of Holland's (1997) personality types and six occupational environmental types were examined as predictors of mortality risk over a 66-year period using Cox survival analyses. Men with Enterprising personalities or in Enterprising occupations had greater mortality risk than men in other groups; congruence on this dimension produced the highest risk. There was also a trend toward reduced risk for Social men in Social occupational environments. Overall, however, the congruence between personality and occupational environment was less important than the particular characteristics of the individual and the occupational environment.

PSYCHOSOCIAL RESOURCES AS PREDICTORS OF MORTALITY IN OLDER WIDOWS

P. Fry¹, D.L. Debats², 1. *Trinity Western University, Langley, British Columbia, Canada*, 2. *Groningen, Bedum, Netherlands*

The research focuses on the predictor role that psychosocial resource factors play in enhancing resilience and longevity of older widows. Mortality risk was examined for 385 widows and followed up in a 6.5 year longitudinal study. Strengths of the association between mortality and specific psychosocial resources were assessed for widows at baseline. Risk of death related to widowhood was estimated using Cox proportional hazard regression on predictor variables of psychosocial resources and resilience traits of control, challenge and commitment. Findings indicated that over time high scores of spiritual resources, family stability, social engagement, and commitment were protective factors reducing the risk of mortality significantly. In contrast, high scores on control and challenge had a negative effect on longevity. Findings demonstrate the utility of exploring modern psychosocial resource factors as a key for future study of resilience and longevity.

PERSONALITY: DIRECT AND INDIRECT INFLUENCES ON HEALTHY AGING AND LONGEVITY

M.L. Kern, H.S. Friedman, *Department of Psychology, University of California, Riverside, Riverside, California*

Personality differences contribute to later life health, well-being, and length of life both directly and indirectly, but a lifespan perspective is essential for understanding how individual differences unfold across the lifespan. Based on our work with the eight-decade Terman Life Cycle Study, we highlight intriguing predictors of older age health and longevity. Conscientiousness predicts better physical health, more productivity, and longer life; extraversion predicts better well-being and social competence; and neuroticism predicts worse subjective well-being and physical health, but not necessarily increased mortality risk. Importantly, individual differences interact with the social environment to moderate life course pathways and to influence later-life outcomes. Together, our findings suggest that employing more multi-faceted, nuanced, and representative models of real world processes is essential for understanding lifelong psychosocial influences on later life health and well-being.

MARITAL HAPPINESS AS A PREDICTOR OF HEALTHY AGING

L.L. Vie, M.L. Kern, C.A. Reynolds, H.S. Friedman, *Psychology, University of California, Riverside, Riverside, California*

Marriage is a key relationship for many Americans, and recent research suggests important links between marital quality and health. However, few studies have examined the relationship longitudinally. The current study considered measures of husband's and wife's marital happiness in early adulthood (mean age = 30 years) as predictors of two components of healthy aging, physical health and subjective well-being. These healthy aging components were derived from items completed 46 years later by participants from the Terman Life Cycle Study (190 males and 179 females). Regression analyses revealed that when husband's and wife's marital happiness are considered together, it is husband's marital happiness that significantly predicts their own health and their wife's healthy aging four decades later, controlling for baseline health, alcohol use, and personality, length of marriage at assessment, and whether the marriage remained intact. Possible explanations for the predictive influence of husband marital happiness are explored.

SESSION 845 (PAPER)

PHYSICAL ACTIVITY AND AGING

LONG-TERM RELATIONS OF INTENTION, PLANNING, AND PHYSICAL ACTIVITY IN A LIFESPAN SAMPLE

T. Reuter¹, J.P. Ziegelmann^{1,2}, S. Lippke¹, *1. Freie Universität Berlin, Berlin, Germany, 2. University of Zurich, Zurich, Switzerland*

Previous research suggests that planning may operate as one possible mediator linking behavioral intentions to health behaviors. This study examines long-term relations in intention, planning, and physical activity. A novel, process-oriented approach for testing mediation hypotheses combining mediation analysis and latent growth curve (LGC) modeling is presented. Data were collected in a sample of orthopedic rehabilitation patients aged 18 to 80 years ($n = 309$) from which repeated measures of intention, planning, and behavior were obtained on 5 measurement occasions across three years after discharge. The LGC mediation model (Chi square (87) = 335.39; RMSEA = .07) showed that the slope in intention affects the growth trajectory in planning, which affects the growth trajectory in physical activity. The present findings regarding long-term relations between intentions, planning, and behavior confirmed previous evidence on the mediating role of planning in the intention-behavior relation.

THE ROLE OF SOCIAL SUPPORT ON WALKING IN COMMUNITY DWELLING OLDER ADULTS

T. Prohaska¹, A. Eisenstein¹, W. Satariano², R. Hunter³, *1. Center for Research on Health and Aging, University of Illinois at Chicago, Chicago, Illinois, 2. University of California, Berkeley, Baltimore, Maryland, 3. University of North Carolina, chapel hill, North Carolina*

Introduction: This study examines the association of types of social support on the number of minutes walked per week and the community locations where older adults walk. **Methods:** Interviews were conducted with 884 adults aged 65 years and older in four US counties; Alameda CA; Cook IL., Allegheny, PA, and Durham/Wake, NC. Interview data included demographic characteristics, self-reported frequency and duration of walking and walking locations (neighborhood streets, parks, trails and indoor malls). Among measures of support were accompanied vs. unaccompanied walking, availability of walking companions, overall social support, and perceptions of neighborhood support. Multivariate analyses were conducted between social support, demographics, and dependent measures, number of minutes walk per week and walk in specific locations. Analyses were conducted separately for men and women. **Results:** While social support items were not associated with minutes

walked per week for men, several support measures were significant for women. Women who agree that people in their neighborhood know each other report walking significantly more minutes. Support measures are significantly associated with walking in parks and on neighborhood streets but not in indoor shopping malls or walking trails. Walking with pets, spouse and alone are positively associated with minutes of walking and walking in neighborhoods and parks. If others walk in the neighborhood, older adults are more likely to do the same. **Discussion:** Interventions to promote walking should consider the types of support that influence the amount of walking in the community and the specific locations where social support is likely to influence walking.

STAYING ONE STEP AHEAD OF DEATH: WALKING SPEED, MORTALITY AND SELF-RATED HEALTH

K. Machacova^{1,2}, S. Neufeld¹, M. Luborsky¹, *1. Institute of Gerontology, Wayne State University, Detroit, Michigan, 2. Faculty of Physical Education and Sports, Charles University, Prague, Czech Republic*

Objective physical function and also self-rated health (SRH) each are important predictors of key health outcomes in later life. Yet, their possible interactions in predicting mortality remain poorly understood. Substantial evidence shows that physical function as measured by performance-based tests, in particular walking speed, strongly predicts subsequent mortality even when adjusted for potential confounders such as age, gender, number of health conditions or health habits. This is also true of an individual's SRH. This study models the predictive value for mortality of usual walking speed, SRH, and their interactions. Data were collected from 239 community dwelling elders (mean age 71.5 ± 3.2 years) enrolled in the Healthy Aging Study, a stratified population sample of Medicare recipients in Philadelphia, including a seven year follow-up period with sixty-four deaths. Data analysis was conducted via logistic regression with mortality as the dependent variable. When modeled separately, both walking speed and SRH were, as expected, significantly associated with mortality after adjusting for several socio-demographic variables, number of health conditions, depression, and health habits. However, when both walking speed and SRH were included in a single regression model SRH was non-significant whereas usual walking speed continued to be independently and significantly associated with mortality ($p < 0.05$). No significant interactions between usual walking speed and SRH were observed. Findings demonstrate that usual walking speed is strongly associated with mortality even after adjusting for potential confounding factors, including SRH. Final discussion considers clinical and intervention implications for this quick and easy to administer test. [Support: NIH/NIA #R01AG15730]

REST-ACTIVITY FRAGMENTATION IN OLDER PEOPLE LIVING IN CARE HOMES

R. Luff, R. Meadows, I. Evers, E. Cope, S. Arber, *University of Surrey, Guildford, Surrey, United Kingdom*

This paper examines the rest-activity patterns of older people living in care homes. While 'normal' rest-activity patterns will show one major active period (day), and one major inactive period (indicating night-time sleeping), it was found that the wake-sleep pattern of care home residents is fragmented. It is argued that this fragmentation is not solely attributable to resident's age; the care home environment and management of resident's personal care needs also contribute. As part of the SomnIA: Sleep In Ageing research project, 10 care homes in South-East England, participated in the study. 125 residents wore actiwatchs (small movement sensors) and were supported by researchers to complete daily sleep and activity diaries over a 14 day period. Actigraphy was used to determine resident's Intradaily Variability (IV), which represents the fragmentation of periods of rest and activity. It was found that 81% of the residents showed a high IV of greater than 1, which indicates a fragmented rhythm, suggesting night-time disturbances and/or daytime napping. Differences in the IV were partially explained by variables relating to the individual resident, including age and level of

dependency. Using the diary data, it is argued that further IV differences can be understood by exploring aspects of residential care, such as hours spent in bed and common causes of waking at night. It is therefore argued, that some aspects of night-time care exacerbate sleep fragmentation which could increase daytime sleepiness. The research is supported by the New Dynamics of Ageing initiative (RES-339-25-0009).

SESSION 850 (SYMPOSIUM)

THE STROKE TELEMEDICINE ACCESS RECOVERY (STAR) PROJECT: A CREATIVE APPROACH TO COMMUNITY-BASED STROKE CARE

Chair: *P.C. Gregory, Physical Medicine and Rehabilitation, UNC-CH, Chapel Hill, North Carolina*

Discussant: *W.E. Haley, University of South Florida, Tampa, Florida*

Stroke disproportionately affects minorities and rural communities in the Southeastern United States. This symposium will examine the barriers to accessing care among stroke patients in a rural community and describe a unique program designed to increase access to care through 90 days of recovery. The Stroke Rehabilitation Process of Care study showed no access to psychiatry consultation and limited access to acute therapies. The Acute Stroke Process of Care study showed limited access to Neurology consult and dysphagia screening. The Family Caregiver Stroke Project showed limited use of 11 formal support services (i.e., physical therapist, home health aide) for older African Americans with stroke related disability. The American Indian Stroke Focus Group Study showed that patients rarely had options in choice of post-discharge rehabilitation setting and families often felt inadequate in caring for the stroke survivor. These studies utilized both quantitative and qualitative data analyses to highlight the gaps in care that include access to specialty care services, allied health services, and community resources. These findings guided development of a novel intervention to help bridge these gaps. The STAR project utilizes telemedicine video-conferencing to provide acute specialty care consultation to patients during their acute hospital stay with follow up at 30 and 90 days post stroke to maximize their rehabilitation access and secondary prevention. It also provides resources to the stroke caregiver and develops a stroke support group. Thus, it provides primary stroke center services to an underserved rural population that has high stroke prevalence and limited recovery resources.

STROKE REHABILITATION PROCESS OF CARE

P.C. Gregory¹, K.R. Faurot^{1,2}, D. Lam², *1. Physical Medicine and Rehabilitation, UNC-CH, Chapel Hill, North Carolina, 2. UNC-CH Gillings School of Global Public Health, Chapel Hill, North Carolina*

Early aggressive stroke rehabilitation maximizes functional recovery. Minority populations have greater stroke prevalence and severity with poorer functional outcomes. The purpose of this study was to evaluate the exposure to stroke rehabilitation resources acutely at a rural community hospital with a high prevalence of stroke and minority populations. We retrospectively reviewed the charts of 40 stroke patients to evaluate acute exposure to stroke services during the acute hospitalization. Results showed that no patients received a physical medicine and rehabilitation consult and rehabilitation assessment were completed in only 70% of cases. There was limited acute therapy exposure with only 67% receiving physical therapy, 45% receiving occupational therapy, and 58% receiving speech therapy. Only 25% of patients were discharged to an acute inpatient rehabilitation facility and 55% were discharged home. This limited exposure to stroke rehabilitation services could adversely affect outcomes. Future studies should assess novel interventions to increase access.

FORMAL SUPPORT USE AMONG AFRICAN AMERICANS WITH STROKE-RELATED DISABILITY

S.W. Williams¹, A.C. Felix², *1. Allied Health, UNC-CH, Chapel Hill, North Carolina, 2. UNC-CH, Chapel Hill, North Carolina*

Most (~80%) stroke survivors return home and depend on family caregivers for stroke-related recovery. While support from families is crucial, formal community-based programs are also crucial for optimal recovery. We used pilot data from The Family Caregiver Stroke Project to examine the extent of community-based formal support use for 36 older African Americans with stroke related disability. All caregivers reported use of at least one of 11 services. Fifty percent reported that the stroke survivor used services of a physical therapist; 36% speech therapist; and 28% reported use of an occupational therapist. However, fewer used a home health aide (11%); transportation (17%); or personal care services (11%). Given that formal supports can minimize the impact of stroke on survivors and caregivers, the relatively low use of formal services for this group suggests increased efforts are needed to maximize use of community-based formal support services for stroke survivors and their caregivers.

THE ACUTE STROKE PROCESS OF CARE STUDY

A.C. Felix, S. Williams, P.C. Gregory, K. Faurot, *UNC Chapel Hill, Chapel Hill, North Carolina*

Stroke morbidity and mortality are highest in the southeastern region of North Carolina (NC). The Acute Stroke Process of Care Study evaluated the rates of secondary stroke prevention at an ethnically diverse rural community hospital during the acute stay. Results of a retrospective chart review revealed a dysphagia screening rate of 35%, a venous thrombosis prophylaxis rate of 45% and no documented stroke risk factor education. These data revealed potential areas for intervention to improve stroke care. The Stroke Telemedicine Access Recovery (STAR) Project provides a comprehensive multi-disciplinary telemedicine intervention to improve stroke patient outcomes. Initial consultation for stroke patients occurs during the acute care hospitalization, with follow-up at 30 and 90 days. A Neurovascular Neurologist provides neurological consultation, a physiatrist provides rehabilitation consultation and a Stroke Caregiver expert provides information to caregivers and patients who may not otherwise receive these services.

THE AMERICAN INDIAN STROKE FOCUS GROUP STUDY

P.C. Gregory, K.R. Faurot, *Physical Medicine and Rehabilitation, UNC-CH, Chapel Hill, North Carolina*

Stroke disproportionately affects American Indians. We conducted 5 focus groups and interviews with 26 stroke survivors and 11 of their family caregivers who are members of federally-unrecognized tribes in rural areas. The goal was to assess the stroke rehabilitation recovery experience, including their evaluation of both their care and their coping strategies. Participants were referred through local health care providers, including home health. Analysis of transcripts revealed that patients reported limited options for services through the course of recovery both acutely and in the community. The stroke caregivers felt ill-equipped to care for the patients. The four recurrent themes that were repeatedly endorsed included: 1) Information deficits regarding treatment options; 2) Lack of long-term resources for patients and caregivers; 3) Coping with limitations through faith; 4) The therapeutic effect of sharing their experiences. The study results identified unmet needs in the community that we could use to target future interventions.

SESSION 855 (POSTER)

CANCER - POSTER SESSION

RECENT TRENDS IN PROSTATE CANCER INCIDENCE AND MORTALITY RATES: A CROSS-COUNTRY COMPARISON

K.E. Garcia, E. Crimmins, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Prostate cancer is the most common cancer in North American and European men. Screening procedures vary among countries and inconsistencies between mortality trends and the utilization of prostate specific antigen (PSA) screening have been reported. Dramatic increases in the reported prostate cancer incidence rates in the U.S., Canada, and Australia after increased PSA screening in the early 1990s have raised concerns as to the validity of PSA screening. Since then, however, prostate cancer mortality rates have decreased by 4.2% per year in the U.S. Our study examined prostate cancer incidence and mortality rates in the U.S., Canada, Australia, and seven European countries (including Denmark, France, Italy, The Netherlands, Spain, United Kingdom, and Sweden) using data from the GLOBOCAN 2002 database. We found that the U.S. has the highest incidence rate (124.8 per 100,000), but also one of the lowest mortality rates (15.8 per 100,000) when standardized to the world population. This suggests that alternate outcome measures (e.g., prostate cancer mortality) aside from prostate incidence rates should be considered in evaluating the usefulness of PSA screening.

CONVERSION FROM ACTIVE SURVEILLANCE TO ACTIVE TREATMENT FOR PROSTATE CANCER: A QUALITATIVE ANALYSIS

M. Wallace, *School of Nursing, Yale University, New Haven, Connecticut*

Active surveillance (AS) has been an option for prostate cancer management among older men for many years. However, only 10.2% of clinically appropriate prostate cancer patients undergo AS. The reasons for the low selection and adherence to AS are unknown. However, it is theorized that AS is associated with a high level of uncertainty which has been found in multiple studies to impact coping, well-being, perception of mental health, psychological adjustment, depression, and quality of life. In fact, AS has been shown to result in intolerable uncertainty that impacts quality of life to the extent that it is actually preferable to undergo treatment to simply "get rid of it" than to continue to live with the possibility of the cancer growing and killing. Men may also be influenced by family members and healthcare providers in making treatment decisions. The specific aim of this qualitative study is to examine the reasons why men convert from AS to active treatment. Improved understanding of why men choose to convert from AS to active treatment will help to develop interventions to support men in AS to remain with this management option. This study uses a qualitative approach to examine the reasons why men undergoing AS convert to active treatment. The results of the study will inform an internet intervention that will provide men who are clinically appropriate for AS with the education and psychosocial support to continue with this management option.

UNCERTAINTY SELF-MANAGEMENT INTERVENTION FOR OLDER MEN UNDERGOING ACTIVE SURVEILLANCE [AS] FOR PROSTATE CANCER

M. Wallace¹, D. Bailey², *1. School of Nursing, Yale University, New Haven, Connecticut, 2. Duke University School of Nursing, Durham, North Carolina*

Active surveillance has been supported as a reasonable management option in men with prostate cancer who are over the age of 65 with low grade and stage disease, associated with low and stable serum prostate specific antigen (PSA) levels. However, active surveillance has been associated with illness uncertainty which impacts many health outcomes.

Recently, evidence has been forthcoming that supports the role of self-management interventions at improving outcomes for men undergoing AS. The purpose of this pilot study was to develop and test a self-management intervention delivered via the internet, on self-efficacy, uncertainty and quality of life of older men undergoing AS for prostate cancer and compare the effects of the intervention with an historical control group. The first phase of the study focused on intervention development with a team of self-management experts who provided key resources for the internet intervention. The intervention was then tested among a pilot sample of active surveillance patients identified by participating urologists. The pilot study provides the groundwork for a larger clinical trial investigating the effectiveness of the uncertainty self-management intervention, delivered via the web, on uncertainty and quality of life in a representative patient sample.

SELF-RATED HEALTH, PHYSICAL FUNCTION AND FATIGUE IN OLDER CHEMOTHERAPY PATIENTS: GENDER DIFFERENCES

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Fatigue is the most common side effect of chemotherapy treatment in cancer patients. Self-rated health has been shown to be an excellent predictor of future health, and physical function is associated with older adults' ability to maintain independence. We were interested in the association of these variables to see whether self-rated health and decrements in physical function were associated with reported fatigue in older patients undergoing chemotherapy. Our sample consisted of 64 patients (26 male; 36 female) aged 65–88 years who were a subset of older adults participating in a study to examine quality of life in older patients undergoing chemotherapy at an NCI-designated comprehensive cancer center. We hypothesized that self-rated health and physical function would be positively associated with fatigue. Physical function was measured by self-report at baseline and performance measures at baseline, midpoint in chemotherapy, and upon completion of the treatment regimen. Fatigue was measured at baseline, midpoint and completion of treatment. In males, our results showed self-rated health (SRH) at baseline negatively correlated with levels of fatigue at baseline and midpoint, and lower-body performance at conclusion negatively correlated with fatigue. In females, SRH and lower-body performance at baseline were correlations with baseline fatigue; lower-body performance was associated with midpoint fatigue. Controlling for age and education, regression models confirmed the association between SRH and fatigue at baseline and midpoint fatigue in male and at baseline in females. Gender differences in longitudinal trends in fatigue during chemotherapy were also observed.

SESSION 860 (SYMPOSIUM)

IMPROVING THE QUALITY OF LIFE OF OLDER ADULTS: PREPARING GERIATRIC NURSE LEADERS

Chair: *C.J. Beverly, Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Discussant: *H.M. Young, University of California Davis, Sacramento, California*

The specialty field of Geriatric/Gerontologic nursing is experiencing a dearth of leaders. Leadership is critical to not only ensure not only expert quality care for the burgeoning numbers of older adults but also critical to promote progress and change within the US healthcare system. An assessment of nursing's leadership made it increasingly clear that gerontologic nurse academicians, clinicians, and administrators need enhanced leadership acumen in influencing and making health policy and in effecting change in systems of care. Early in the first phase of the Arkansas John A. Hartford Center of Geriatric Nursing Excellence (AR HCGNE), the leadership group decided to place a major focus

on developing leadership competencies of current and future faculty and students in the areas of research, macro-system change, policy, and education. To that end, the leadership of the AR HCGNE identified and implemented strategies to develop leadership in four areas: faculty as emerging leaders, research with particular emphasis on pre- and post-doctoral scholars and fellows, increasing gerontological nursing expertise in baccalaureate programs in the southern region and establishing an intensive eight week summer externship that is an eight week intensive in gerontological nursing. The goal of these programs capture the thoughts of Fagin (2000) in which she noted that the most needed geriatric nursing attribute is transformational leadership-leadership that shapes the changing social architecture, and then supports its progression. A synthesis of strategies, outcomes, and lessons learned through the development and implementation of each of these four areas will be presented.

GERIATRIC NURSING RESEARCH LEADERSHIP DEVELOPMENT

C. Beck, P. Tsai, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The development of geriatric nurse leaders in research involves increasing their ability to publish and secure funding so that they can eventually mentor others in this process. To cultivate these skills, we develop formal mentoring plans for faculty researchers. Another important skill set for is providing constructive critique to others and receiving critique from others. The HCGNE sponsored Aging Research Interest Group at UAMS provides an opportunity for geriatric faculty and students to meet monthly and critique each other's manuscripts and research proposals within a collegial, non-threatening environment. The interdisciplinary participation in the Group also adds the unique and enriching perspectives of other disciplines to the critique. Participation in the group has increased participants understanding of both giving and receiving constructive critique. Lastly, we invite baccalaureate students as part of a Geriatric Summer Externship to observe the faculty's research activities, including the Aging Research Interest Group.

THE COALITION APPROACH TO EXPANDING GERIATRIC CURRICULAR CAPACITY IN SOUTHERN SCHOOLS OF NURSING

E. Souder¹, C. Cole^{1,2}, C.J. Beverly¹, S. Lubin¹, *1. U of Arkansas for Medical Sciences, Little Rock, Arkansas, 2. Central Arkansas Veterans Administration, Little Rock, Arkansas*

The South has a disproportionate number of aging individuals; however, only 5% of nursing faculty have advanced geriatric education, and it is unknown to what degree geriatric nursing content is taught. The Southern Region Coalition, formed in 2004, is an outreach effort of the Hartford Center for Geriatric Nursing Excellence to integrate core geriatric competencies in nursing curricula. To assess the current status of geriatric curricula in undergraduate programs, we conducted a survey of all BSN nursing programs in the 15 states making up the Southern Region Education Board. Of survey data collected to date, 58% of schools require a dedicated undergraduate geriatric nursing course, 50% require a clinical component, and 60% offer the course in the junior year. 58% of respondents reported that content mapping of geriatric content has been completed. The goal is to have all programs map geriatric content to ensure that competencies are being taught.

EMERGING LEADERS IN GERIATRIC NURSING

R.E. McAtee, C. Cole, *University of Arkansas for Medical Science, Little Rock, Arkansas*

Leaders who can establish and communicate a compelling vision are essential to the profession of geriatric nursing. The "Emerging Leader" program of The Arkansas Hartford Center of Geriatric Nursing Excellence has provided three junior members of the geriatric faculty the opportunity to grow as leaders and develop requisite personality traits.

The three emerging leaders are partnered with three senior members of the leadership team and participate in all aspects of leadership activities. Although research demonstrates that the most relevant aspects of personality for effective leadership are surgency, conscientiousness, agreeableness, adjustment and intelligence. The emerging leaders have learned that some personality traits are considered especially relevant to successful leadership. Those most salient are high energy levels, stress tolerance, self-confidence, internal control orientation, emotional maturity and integrity. The opportunity to observe successful members of the leadership team has provided an invaluable opportunity for growth for these emerging leaders.

INNOVATIVE RECRUITING: GROWING A GERIATRIC SUMMER EXTERN PROGRAM

C. Cole^{1,2}, C. Beverly¹, E. Souder¹, C. Beck¹, *1. College of Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas, 2. Central Arkansas Veteran's Administration, Little Rock, Arkansas*

The mission of the University of Arkansas for Medical Sciences College of Nursing Hartford Center of Geriatric Nursing Excellence (HCGNE) is to prepare highly educated nurses in three areas: leadership, research, and education to care for older adults. To achieve this goal we implemented an innovative geriatric summer extern program (GSEP) in which students between the junior and senior year are selected to participate. GSEP provides externs the opportunity to work with geriatric nurse leaders in each of the three areas. The 8-week summer externship offers a stipend of \$4,000 plus tuition for one two-hour course: Summer Extern Program and Role Seminar. After five years, GSEP is growing and the majority of externs are pursuing an advanced degree in nursing and identified gerontologic nursing as their specialty. GSEP is a viable, effective, and exciting way to recruit our best and brightest into a career as gerontologic nurse leaders.

SESSION 865 (SYMPOSIUM)

MUSCLE POWER AND MOBILITY: MEASURES, MECHANISMS AND INTERVENTIONS

Chair: *E.S. Strotmeyer, Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*
Discussant: *J.F. Bean, Harvard University, Boston, Massachusetts*

Aging muscle is characterized by the loss of muscle fibers, predominantly type 2 fast twitch fibers, and an increase in clustering of type 1 fibers. Given the known atrophy and denervation thought to underlie muscle aging, it is remarkable how little is known at the clinical and population levels about the relationship between age-related lower extremity muscle power (LEMP) decline and physical disability. LEMP may influence physical function differently than strength, since LEMP is dependent on factors intrinsic to both the nervous and musculoskeletal systems. LEMP is an independent predictor of disability in older adults and may be a better predictor of certain physical function measures compared to strength. Whereas muscle strength represents maximal limb force production, muscle power represents the combination of muscle force and velocity. This symposium will describe the biology of LEMP loss with aging (Dr. Fielding) and review data from clinical and epidemiologic studies to improve LEMP in older adults (Dr. Marsh). Importantly, the impact of LEMP training in older adults to functional outcomes will be illustrated (Drs. Marsh, Delmonico). Finally different LEMP measurement methods will be evaluated as a contributor to multiple functional outcomes and disability, with a focus on epidemiologic studies (Dr. Caserotti). The discussion led by Dr. Bean will critically review current LEMP research, focusing on unresolved scientific issues and defining future directions for the role of LEMP in preventing physical function decline and disability in older adults.

BIOLOGICAL BASIS OF MUSCLE POWER LOSS WITH ADVANCING AGE

R.A. Fielding, *Nutrition, Exercise Physiology, and Sarcopenia Laboratory, Tufts University, Boston, Massachusetts*

Although lower extremity muscle strength is a reliable measure of impairment and an index of functional capacity in the elderly, peak power or the maximum capacity to perform muscular work per unit of time may play a more important role in functional independence and disability prevention than muscle strength alone. Recent work from our laboratory suggests that peak lower extremity power, compared to lower extremity strength, is a better predictor of performance-based function and is an independent predictor of self-reported disability in frail elderly women. Several recent reports have attempted to delineate the underlying biological bases for the deficits in muscle power output that are manifested with advancing age. In this presentation, I will attempt illustrate the varying degrees to which muscle loss (sarcopenia), intrinsic muscle contractile properties (specific force; unloaded shortening velocity), and neuromuscular control (central activation, antagonist muscle activation) contribute to the age-associated decline in muscle power output.

DO INTERVENTIONS DESIGNED TO INCREASE LOWER EXTREMITY MUSCLE POWER LEAD TO IMPROVEMENTS IN PHYSICAL FUNCTION IN OLDER ADULTS?: EVIDENCE FROM RCTS

A.P. Marsh, *Health and Exercise Science, Wake Forest University, Winston Salem, North Carolina*

Both muscle strength and power decline with age, but power declines earlier and at a faster rate than strength. Cross-sectional and longitudinal studies show that lower extremity muscle power is associated with physical function and is predictive of functional limitations and disability in older adults. However, there are few RCTs that have been designed to improve muscle power in older adults that have also assessed physical function. For example, in 45 older adults (74.8±5.7y) we have found 12 weeks of lower extremity power training to produce similar increases in strength (~20%), but 2-fold greater improvements in power compared to strength training. Although we observed improvements in physical function favoring the power training group, these changes were modest. This presentation will provide an overview of these RCTs with an emphasis on the importance of the modes of activity used to increase power and the link between muscle power and physical function.

EFFECT OF RESISTANCE TRAINING WITH WEIGHT LOSS ON LOWER EXTREMITY MUSCLE POWER IN OVERWEIGHT OLDER ADULTS

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We investigated the effect of traditional resistance training (RT) plus weight loss (WL) on muscle function in 10 overweight to obese (BMI=32.4, SD=2.5 kg/m²) older adults (age=65, SD=5 yrs). Subjects underwent a hypocaloric diet and engaged in RT three times per week for 16 weeks for the leg extensors and flexors using exercise machines. Lower extremity muscle power (LEMP) and strength were assessed using a pneumatic leg extension machine, and LEMP was measured at 40%-70% of measured strength. Subjects lost -11.4 ± 2.7% of their body weight (p=0.003) and had an increase in LEMP (5.3 ± 2.3%, p=0.045) and strength (17.4 ± 4.3%, p=0.003). A randomized, follow-up WL study that used higher-velocity RT in a comparable group of obese older adults (n=27) showed similar changes in LEMP and strength. These data suggest that strength and LEMP can be improved with RT during diet-induced WL, but LEMP improvements may be attenuated.

ASSESSMENT OF MUSCLE POWER IN OLDER ADULTS AND ASSOCIATION WITH FUNCTIONAL PERFORMANCES

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The association of lower extremity muscle power (LEMP) and functional performance may depend on the fraction of force (% of individual maximal strength) and the time required to accomplish a specific motor task. Decline in maximal strength with increasing age increases the fraction of force for the same motor task and may modify this association. We assessed LEMP during multi-joint weight-bearing (jumping, chair-rise) versus non-weight-bearing (Nottingham power Rig - NPR) tests in 60-65 and 79-85 year-old women. LEMP showed the highest age-deficit for NPR (38%) followed by jumping (25%) and chair-rise (7%, ns). The highest correlation was found for LEMP jumping and chair-rise in the oldest group (r=0.7). Correlation with other functional performances (walking, balance, chair-rise, Physical Performance Test battery) varied according to the age-group and LEMP method implemented. This presentation will highlight the importance of LEMP measurements methods in determining the relationship with physical function in older adults.

SESSION 870 (POSTER)

PHYSICAL FUNCTION

SELF-ASSESSED PHYSICAL FUNCTION LEVELS OF OLDER PERSONS WITH/WITHOUT FIBROMYALGIA

D.N. Rutledge, C. Jones, B. Cherry, L. Zettel-Watson, L. Lopez, R. Cayetano, *California State University, Fullerton, Fullerton, California*

This study aimed to determine whether persons 50+ with fibromyalgia (PWF) report decreased physical functioning compared to healthy peers. In 70 community dwelling PWF (93% female, M age = 60 years), 76 persons without FM (PWO; 67% female, M age = 68 years), PWF had lower self reported physical function (Physical Ability Impact scale) than did PWO when age, gender, and depression were controlled (p < .0001). Greater activity limitations were reported in PWF (e.g., 51% vs. 95% PWO could climb 1 flight stairs; 49% vs. 99% could walk 1/2 mile). Proportions of those with specific activity limitations were not different by age (50-64 years vs. 65+) for PWF or PWO, indicating that decrements were FM-related, not age-related. Findings validate differences in self reported physical function in older PWF as compared to healthy elders. Deconditioning has major impacts on life quality. Programs are needed to assist PWF to prevent/reverse deconditioning.

ASSOCIATIONS BETWEEN SERUM BIOMARKER CHANGE AND FUNCTIONAL CHANGE IN VERY OLD ADULTS

J. Sanders¹, R. Boudreau¹, A. Cappola², A. Arnold³, P. Chaves⁴, J. Robbins⁵, M. Cushman⁶, A.B. Newman¹, 1. *University of Pittsburgh, Pittsburgh, Pennsylvania*, 2. *University of Pennsylvania, Philadelphia, Pennsylvania*, 3. *University of Washington, Seattle, Washington*, 4. *Johns Hopkins University, Baltimore, Maryland*, 5. *University of California Davis, Davis, California*, 6. *University of Vermont, Burlington, Vermont*

Though cross-sectional associations between biomarkers and functional ability in the elderly have been described previously it is unknown how biomarkers and function change simultaneously and which changes are most strongly correlated. We describe correlates of biomarker and functional change in the Cardiovascular Health Study All Stars study [N=991, mean (SD) age 85.2 (3.6) years in 2005-06]. Serum biomarkers [dehydroepiandrosterone sulfate (DHEAS), androstenedione, interleukin-6 (IL-6), insulin-like growth factor-1, cholesterol, glucose] and function (gait speed, grip strength, 3MSE and DSST scores) were meas-

ured at 1996-97 and 2005-06. We used linear models adjusted for 1996-97 covariates (age, race, smoking, BMI, marital status, comorbidities). In men: a 20mg/dl cholesterol or 5mg/dl glucose drop was associated with -0.60kg ($p<0.01$) or -0.10kg ($p=0.01$) grip strength change; a 1pg/ml IL-6 increase with -0.43 point ($p=0.05$) and -0.40 point ($p=0.05$) 3MSE and DSST change. In women: a 0.25ug/ml DHEAS drop was associated with change in grip strength (-0.51kg, $p<0.001$), gait speed (-0.03m/s, $p<0.01$), 3MSE score (-1.14 points, $p<0.001$), and DSST score (-1.24 points, $p<0.01$); a 1pg/ml IL-6 increase with grip strength (-0.28kg, $p<0.001$) and gait speed (-0.01m/s, $p=0.02$) change. Change in DHEAS or IL-6 was most associated with functional change in very old adults, but associations varied by gender. Prospective data with >2 measurements of these factors would provide greater mechanistic insight across the lifespan.

THE ASSOCIATIONS BETWEEN BASELINE SERUM VITAMIN E CONCENTRATIONS AND RECOVERY OF PHYSICAL FUNCTION DURING THE YEAR AFTER HIP FRACTURE

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Background: Poor nutritional status after hip fracture is common and may contribute to the steep decline and protracted recovery of physical function post-fracture. Low serum concentrations of vitamin E have been associated with incident decline in physical function among older adults, but the role of vitamin E in physical recovery has never been explored in older hip fracture patients. We examined whether serum vitamin E concentrations shortly after hip fracture were associated with physical function at specific points and throughout the year after fracture. Methods: Baseline concentrations of the two major forms of vitamin E – alpha and gamma tocopherol – were assessed among female hip fracture patients in the Baltimore Hip Studies cohort 4 (BHS 4). Four physical function measures; Lower Extremity Gain Score (LEGS), Six Minute Walk Test (6MWT), SF-36 Physical Functioning Domain (SF36-PF), and Yale Physical Activity Score (YPAS); were assessed at 2, 6, and 12 months post-fracture. Generalized estimating equations modeled the relationship between serum tocopherol concentrations and physical function at each post-fracture time point. Results: Ninety-six women were studied. Higher levels of alpha tocopherol and combined alpha and gamma tocopherol were associated with longer 6MWT distances ($p<0.01$) and higher YPAS scores ($p<0.07$) during the year post hip fracture after adjusting for covariates. Conclusions: Serum concentrations of both alpha and gamma tocopherol were associated with better physical function after hip fracture. These micronutrient markers of a healthy diet may represent a potentially modifiable factor related to recovery of physical function after hip fracture.

A NOVEL APPROACH TO ESTIMATE OVERALL FUNCTIONAL FITNESS IN OLDER ADULTS: A PILOT STUDY

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Functional fitness is a major determinant of quality of life and an important predictor of many health outcomes in later life. Functional fitness is a latent construct consisting of specific components essential for independent functioning; including muscle strength, stamina, flexibility and agility. Accurately estimating overall fitness is essential for clinical and research purposes because multiple evaluations are not always satisfactory or even desirable. However, the structure of functional fitness and the contribution of its individual components have

been under-investigated. The Senior Fitness Test (Rikli & Jones, 2001), which consists of six performance-based tasks validated to measure functional fitness components, was administered to 78 adults (82.0 ± 8.8 years). Single level structure model of Overall Functional Fitness was tested using structural equation modeling performed in LISREL. The standardized maximum likelihood solution of the initial model showed satisfactory goodness-of-fit indices (RMSEA = 0.00; NFI = 0.95; GFI = 0.97; RMR = 0.038 and $\chi^2 = 7.64$, $df = 9$). Findings demonstrate that the structure of functional fitness is one-dimensional and contributions of its individual components are hierarchical in nature. Therefore, an accurate estimation of Overall Functional Fitness considers the weighted sum, rather than a simple sum, of all identified components. Using an estimation of Overall Functional Fitness, derived from performance measures on the six tasks in the Senior Fitness Test, contributes to implementing and evaluating effective activity/exercise programs targeting the select needs of older individuals that become increasingly variable with the onset of diseases or disabilities that often accompany the aging process.

SUCCESSFUL AGING AND MENTAL AND PHYSICAL FUNCTIONING IN OLDER CANADIAN MEN: MANITOBA FOLLOW-UP STUDY

R.B. Tate, D.J. Bayomi, *Community Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada*

Since 1948, the Manitoba Follow-up Study has investigated the natural history of cardiovascular disease in a cohort of 3,983 originally healthy, young men. After 60 years, 849 men are alive (mean age 87 years). Since 1996, seven "Successful Aging" (SA) questionnaires have been administered, each asking about activity, living arrangements, mental and physical functioning (SF-36), and the man's definition of SA. Our objective is to determine whether specific theme(s) in a man's definition of SA is related to his mental and physical functioning. Generalized linear model methodology was used to examine repeated standardized mental (MCS) and physical component scores (PCS). At up to 7 time points each, 1,753 community dwelling men contributed a total 6,782 survey responses. Each survey response included an MCS and PCS score and indicator variables for each of 28 SA themes. Over the 12 year observation period, mean MCS remained constant at 54 ± 8 , while mean PCS declined from 46 ± 10 to 41 ± 10 . In multivariate models, controlled for age and year of survey, longitudinally the SA themes of physical activity, having interests, adaptation, and retirement were each independently associated ($p<0.05$) with an increase in MCS and PCS. In addition, the SA themes of attitude, happiness, mental activity, acceptance, independence and longevity were associated ($p<0.05$) with better MCS, but not PCS. Age was significantly related to decline in MCS and PCS (both $p<0.001$). Our prospective evidence demonstrates that mention of specific themes in an older man's definition of successful aging is related to higher mental and physical functioning.

MEASUREMENT INVARIANCE OF FUNCTIONAL OUTCOMES IN OLDER ADULTS WITH SELF-REPORTED VISUAL IMPAIRMENT

B.A. Steinman¹, S. Berger², 1. *Gerontology, University of Southern California, Los Angeles, California*, 2. *Boston University, Boston, Massachusetts*

Studies in cognitive aging have suggested a strong association between vision and cognition, such that both share a negative trajectory with old age. Thus, performance on cognitive tasks has been predicted by vision measures with seemingly little relation to tasks at hand. A second body of research associates vision loss and functional decline. Generally, older adults with visual impairments have relatively more difficulty performing functional tasks than those with unimpaired vision; more specifically, older adults with visual impairments have greater difficulty with instrumental activities of daily living (IADLs), which are thought to be cognitively more complex than activities of daily living

(ADLs). The purpose of this study was to determine whether items that compose traditional multidimensional facets of functioning (i.e., ADLs & IADLS) in older adults are equivalent between older persons with visual impairments compared to those with good vision. Older persons with visual impairments are hypothesized to respond differently to highly cognitive-oriented items (e.g. managing money) compared to persons without visual impairments, due to concurrent losses they may experience in cognition. Functional variables from the 2006 wave of the Health and Retirement study were analyzed using SPSS. Participants were selected if they were 70 or older. Logistic regression was conducted controlling for demographics, health measures, and four measures of cognition on each measure of ADL and IADL functioning. Results suggest non-invariance of cognitively-oriented functional items between the vision groups. Findings suggest a need for improved/unique structural measures of functioning in older persons with visual impairments.

THE ACTIHEART™ TO MEASURE HEART RATE AND MOTION RESPONSE TO ACTIVITIES IN OLDER SURGICAL PATIENTS

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Older adults often experience loss of function during hospitalization, thus clinical care activities (activities), like transferring, are part of routine hospital care to prevent functional decline. A paucity of research exists to measure this type of activity objectively. This instrument feasibility study evaluated the utility of the Actiheart™ to measure heart rate and motion responses to five activities, turning, dangling, transferring, sitting, and walking. Fifty-four adults aged 65 and older ($M=72$), scheduled for surgery, participated in a simulation of the five activities. The study's major findings indicate that the Actiheart™: 1) successfully measured motion and heart rate during various activities; 2) works well to measure activities that may not show much change in motion alone (like sitting) or heart rate alone (like turning); and 3) can reasonably measure heart rate and motion even in the presence of covariates such as gender and BMI. One-way repeated measures analyses of variance also showed that the Actiheart™ discriminated significant differences in average heart rate and total motion across the five activities (Wilk's $\lambda = 0.21$ [$F_{4, 49} = 45.37, p < 0.001$] and Wilk's $\lambda = 0.23$ [$F_{4, 50} = 41.17, p < 0.001$], respectively). This study was the first to explore the utility and feasibility of the Actiheart™ in a cohort of older adults in a hospital-like environment. It should next be used in an inpatient setting to examine activity patterns of older adults during hospitalization.

I-SEE INTERVENTION ASSOCIATED WITH INCREASED PHYSICAL PERFORMANCE FOR DUALY IMPAIRED LONG-TERM CARE ELDER

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Individualized –Sensory Enhancement for the Elderly (I-SEE) is a nursing intervention for visually and/or hearing impaired long-term care elders. This study investigated the impact of the I-SEE intervention on physical performance (Nursing Home-Physical Performance Test, NH-PPT), cognitive performance (MMSE), depression (GDS) and social engagement (BASE). The I-SEE intervention includes nursing assessments, actions, and referrals. Resident's ($n=117$) from five long-term care settings were randomly selected and enrolled if they were visually impaired (20/50 vision or worse, $n=41$) or hearing impaired (PTA \geq 40DBs, $n=37$), or both ($n=39$). Participants took part in the I-SEE intervention (I-SEE, $n=67$) or attention control (AC, $n=57$) conditions over a period of 16 weeks. Due to non-normality, Friedman's test was

used to evaluate within group changes and paired comparisons were made using the Wilcoxon signed ranks test. Results of the Friedman test indicated differences in the NH-PPT across time within the dually-impaired I-SEE group ($P=.03$). Follow-up comparisons revealed that within the dually-impaired group, NH-PPT scores were higher at week 16 ($M=15.7, Md=17$) when compared to baseline ($M=14.4, Md=15$; $P=.01$). There were no changes in the NH-PPT scores observed within the remaining groups. Nor were there improvements in MMSE, GDS, or BASE scores in any sensory-impaired I-SEE group. The I-SEE nursing intervention shows promise for improving physical performance in dually impaired long-term care elders.

SESSION 875 (SYMPOSIUM)

SUSTAINABILITY, IMPUTATIONS AND MISSING DATA: 12-MONTHS AFTER A PHYSICAL ACTIVITY COUNSELING TRIAL

Chair: M.C. Morey, *Geriatrics, VA and Duke Medical Centers, Durham, North Carolina*

Discussant: C.F. Pieper, *Geriatrics, VA and Duke Medical Centers, Durham, North Carolina*

Successful completion of a randomized trial marks the beginning of interpreting, understanding and disseminating its full impact. For behavioral trials promoting physical activity, there is hope that study participants remain physically active. Investigators examine the data for insight that informs subsequent work. The Veterans LIFE study (Learning to Improve Fitness and Function in Elders) was a 12-month primary care-based, counseling trial in which 400 older veterans (ages 70-92) were randomized to either multi-component physical activity counseling (PAC) or usual care (UC). The primary endpoint was change in usual and maximal gait speed. Although no between group differences were noted at 12 months for usual gait speed, rapid gait speed improved significantly more for the PAC group [1.56(0.41) m/sec to 1.68(0.44) m/sec] compared to UC [1.57(0.40) m/sec to 1.59(0.42) m/sec, $p=0.04$]. A year after completion of the trial each study participant was invited to undergo reassessment of study outcomes. The first paper will provide an overview of the trajectory and sustainability of the outcomes and behaviors targeted by the intervention. The second paper will examine transitions over time in personal health goals. The third paper will discuss challenges associated with the analysis of the 400-meter walk test as an outcome measure over 5 time points in which study participants either "completed", "did not complete" or "refused to attempt" the test at various time points. The fourth paper will discuss the implications and strategies of dealing with missing data in the primary endpoint.

TRAJECTORIES OF PHYSICAL PERFORMANCE AND ACTIVITY AFTER 12-MONTH CESSATION OF TELEPHONE COUNSELING

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The Veterans LIFE study was a 12-month counseling trial in which 400 older veterans (ages 70-92) were randomized to either multi-component physical activity counseling (PAC) or usual care (UC). The primary endpoint was change in usual and rapid gait speed. Although no between group differences were noted at 12 months for usual gait speed, rapid gait speed improved significantly more for the PAC group [1.56(0.41) m/sec to 1.68(0.44) m/sec] compared to UC [1.57(0.40) m/sec to 1.59(0.42) m/sec, $p=0.04$]. Following one-year with no participant contact: (a) the trajectories and between group differences observed for usual gait speed were sustained; and (b) although the magnitude of change over time decreased between the two arms for rapid gait, overall between-group differences were sustained [1.64(0.43) m/sec

at 24 months compared to UC 1.58(0.42) m/sec, $p=0.035$ for omnibus test of group and group x time].

PERSONAL HEALTH GOALS IN OLDER ADULTS: PROSPECTIVE TRENDS AND LONG-TERM PREDICTORS

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Goal setting is a recognized tool for improving performance. To date, little research has examined individual progress on self-selected goals. Participants in the Veterans Life Study physical activity trial were asked to identify their most important health goal and rank on a scale of 0 (worst) to 10 (best) where they perceived themselves at the present time. Participants were instructed to rank themselves on this same goal again at 6-, 12-, and 24-months. A series of latent growth curve analyses were performed to assess patterns of change in goal status and the effects of individual factors on both initial status and change over time. Although both the treatment and control groups demonstrated improvement on their goals, the rate of change was significantly greater in the treatment group. Subsequent analyses examining predictors of change in goal status from 12 months to one year post-intervention will be discussed.

THE 400 METER WALK AS AN OUTCOME MEASURE IN LONGITUDINAL TRIALS

R. Sloane¹, M.C. Morey^{2,1}, C.F. Pieper¹, M. Peterson^{2,1}, *1. Duke University, Durham, North Carolina, 2. Veterans Affairs Medical Center, Durham, North Carolina*

The 400 Meter Walk is a commonly used method to assess mobility in physical performance trials of older persons, expressed as the number of seconds to walk the entire distance or dichotomized as the ability to walk the entire distance. It has been shown to be a reliable measure with good predictive qualities but when used as a continuous outcome measure care must be taken to adequately process incomplete or missing data and extreme values. The continuous metric was used in the Veterans LIFE study as an outcome measure over the five assessments. At baseline 15.5% of the participants could not complete the 400 meters, and in subsequent assessments the proportion of non-completers increased (17.1%, 19.1%, 22.0% and 20.5%). We discuss methods for imputing reasonable estimates of velocity for the non-completers using partial data from the 400 Meter Walk, or from other walking measures where the participants refused outright.

ISSUES WITH MISSING DATA IN EXERCISE INTERVENTIONS FOR ELDERLY WITH LONG-TERM FOLLOW-UP

M. Peterson^{1,2}, C.F. Pieper², R. Sloane², M.C. Morey^{1,2}, *1. Research, VA Medical Center; Durham, North Carolina, 2. Duke Medical Center, Durham, North Carolina*

Missing data is ubiquitous in research involving older adults. Exercise interventions are particularly susceptible to missing data due to attrition. In addition, substantial data lost to follow-up can make post-intervention maintenance difficult to interpret. This talk will discuss strategies and their implications of dealing with missing data in exercise interventions. Of the 400 baseline subjects in the Veterans LIFE study, usual and rapid gait speed data from 355 and 238 subjects were available at 12 and 24 months, respectively. We will estimate change in gait speed over time, with a focus on change from 12 to 24 months. Repeated measures analysis of variance (ANOVA) with and without imputation, and hierarchical linear models (HLM) will be employed and estimates of change compared. Discussion of the statistical models' estimates, variances, and appropriately modeling the form of trajectory of gait speed will be highlighted.

SESSION 880 (SYMPOSIUM)

UNDERSTANDING THE INFLUENCE OF THE CULTURE OF CARE ON END-OF-LIFE CAREGIVING

Chair: J. Penrod, *Penn State School of Nursing, University Park, Pennsylvania*

Discussant: J. Hupcey, *Penn State School of Nursing, University Park, Pennsylvania*

Family caregivers are integral components of the patient system receiving care for end-stage chronic illness. While characteristics of caregivers/caregiving have been well-documented, little is known about the caregiving trajectory from active treatment through the end of life. These partners-in-care provide needed care and assistance over years of illness, interfacing with health care providers only during brief office visits across the trajectory of illness. This symposium presents findings of an ethnographic inquiry that examined how the culture of care influenced the supportive care of informal family caregivers across three distinct death trajectories: heart failure, lung cancer, and amyotrophic lateral sclerosis. Paper 1 introduces basic conceptual models for understanding caregiving across unique death trajectories and four key elements identified as indicative of the culture of care in the clinic settings. Each of the following papers addresses the four elements of the culture of care as manifest in the specific clinics: Paper 2: Heart Failure; Paper 3: Lung cancer; Paper 4: ALS. The three clinics examined in this study demonstrate markedly different approaches to managing the care of patient systems and, ultimately, to the progressive end of life care provided. Understanding the influence of the culture of care on caregivers will permit more thoughtful development of strategies to support family caregivers as both co-providers and co-recipients of end-of-life care in a variety of care settings.

DEATH TRAJECTORIES AND THE CULTURE OF CARE

J. Penrod, J.E. Hupcey, B. Baney, P.Z. Shipley, P.C. Spigelmyer, J. Thurheimer, *Penn State School of Nursing, University Park, Pennsylvania*

A trajectory model of caregiving derived through grounded theory frames the phases and critical junctures of caregiving, demonstrating that the illness trajectory has a profound effect on the course and duration of phases of caregiving. A subsequent ethnographic study of the culture of care in clinics serving three distinct death trajectories revealed four key elements that significantly influenced the caregiving experience. The first element, Role of the Health Care Provider, addresses the degree to which the delivery system functions as a multidisciplinary team versus individuals. Second, Conceptualization of the Patient System addresses how the clinicians incorporate informal caregivers into the clinic visit. Third, the Focus of the Visit, deals with whether the visit includes holistic concerns of the illness/caregiving experience or tends to be highly constrained on the patho-physiological course of the illness. Finally, the Flow of Care, refers to the flow of care both in clinic and between visits.

THE CULTURE OF CARE IN A LUNG CANCER CLINIC

J. Thurheimer, J. Penrod, B. Baney, *Penn State School of Nursing, University Park, Pennsylvania*

In lung cancer, diagnosis/staging is followed by aggressive curative treatment. Early visits are focused on treatment outcomes and related side effects. For many, this curative focus shifts abruptly toward comfort care when available treatments are unsuccessful. This mixed trajectory (curative/comfort care) is evident in the culture of care. The Role of Health Care Providers in this clinic is differentiated. Physicians bear the responsibility for breaking bad news or good news. Nurses serve as de-briefers, helping patient systems to interpret rather complex medical communications, discussing treatment management, and initiating end of life discussions. The Conceptualization of the Patient System by medical clinicians focuses on the cancer; however, nurses integrate family caregivers more fully while debriefing the medical communication, as

co-providers of care. The Focus of the Visit pivots on response to treatment. While the Flow of Care is focused on the clinic visit, frequent between-visit communications are handled by the nurse.

THE CULTURE OF CARE IN AN ALS CLINIC

P.Z. Shipley, J. Penrod, *Penn State School of Nursing, University Park, Pennsylvania*

Amyotrophic Lateral Sclerosis [ALS] is a progressive degenerative neuromuscular disease affecting one's ability to move, swallow and, ultimately, breathe. Family caregivers provide increasingly supportive care often extending over years of declining capacity. The duration of this debilitating trajectory varies; however, the outcome is clear: ALS is a terminal diagnosis. A unique culture of care surrounds this expected death trajectory. This clinic functions as a highly coordinated interdisciplinary team, integrating varied Roles of the Health Care Providers. The Conceptualization of the Patient System is marked different: family caregivers (and paid caregivers) are embraced as both co-providers and co-recipients of care. The Focus of the Visit is holistic rather than medically-driven. Family caregivers are seamlessly incorporated into all aspects of the visit. The Flow of Care is not restricted to the clinic visit, as team members are available via email or phone, home visits, and specialized support group meetings.

THE CULTURE OF CARE IN A HEART FAILURE CLINIC

P.C. Spigelmyer, J. Penrod, *Penn State School of Nursing, University Park, Pennsylvania*

Heart failure is a progressively deteriorating condition with high morbidity and mortality. The trajectory of illness is marked by a high degree of uncertainty and the course of treatment is focused on maintaining medical stability using medications, dietary restrictions, and implantable devices. This unexpected death trajectory is reflected in the culture of care. The Role of Health Care Providers in this clinic is constrained to symptomatic complaints and markers of the progressive disease. Relational issues or functional incapacity are not commonly addressed. The Conceptualization of the Patient System focuses on the person with heart failure. Accompanying family caregivers are rarely integrated into the visit unless they initiate interaction. The Focus of the Visit is clearly on medical stabilization and related diagnostic tests that confirm stability. The Flow of Care is highly focused on the clinic visit, between-visit communications are most often symptom-oriented using call-in systems.

SESSION 885 (SYMPOSIUM)

UTILIZING THE SUMMER: AN OVERVIEW OF SUMMER TRAINING PROGRAMS AND INSTITUTES ON AGING RESEARCH

Chair: *K.E. Garcia, Davis School of Gerontology, University of Southern California, Los Angeles, California*

Summer training programs and institutes on aging research are excellent opportunities for emerging scholars to gain a greater understanding of methodological approaches, sharpen their analytic skills, and advance their research agenda. Trainees improve their research skills through extensive collaboration with distinguished researchers and learn about new and ongoing areas of research through lecture series and workshops led by experts from diverse academic disciplines. Summer programs provide research development and grant application consultation, and launch trainees into a career trajectory in research on aging. This symposium will provide an overview of national and international summer training programs and institutes for predoctoral, postdoctoral, and emerging scholars, with a focus on programs supported by the National Institute of Aging. A panel discussion on the attributes of a competitive application will be followed by a question-and-answer period with representatives from multiple training programs.

A BRIEF OVERVIEW OF SUMMER OPPORTUNITIES FOR STUDENTS INTERESTED IN AGING

S. Vasunilashorn, Davis School of Gerontology, University of Southern California, Los Angeles, California

There are a number of opportunities for students interested in obtaining additional research and training outside of their institution; however, given the limited time of available summers, selecting which programs are best fit for each individual can be a difficult task. This presentation will highlight one student's experiences from various aging-related summer opportunities. The programs and workshops to be discussed include the: National Institutes of Health Summer Internship Program in Biomedical Research, Cells to Society (C2S) Summer Biomarker Institute hosted by Northwestern University, International Program in Aging Research hosted by Penn State University, RAND Summer Institute, as well as summer courses offered at various universities and institutions. Research skills and training obtained from these and other programs will enhance the student's knowledge base and better prepare individuals for successful careers as professionals in the field of gerontology and geriatrics.

SPECIFIC SUMMER TRAINING PROGRAMS TO CONSIDER

A. Hagedorn, Davis School of Gerontology, University of Southern California, Los Angeles, California

A variety of specific summer training courses and funding opportunities will be described. Deadlines are early, with applications accepted as early in November (up to 7 months in advance), and due by March 1st or April 1st, so it is important to start planning your summer early. After attending this session, participants will be aware of the major summer training programs available in aging. For pre-doctoral students there are a variety of short training courses for specific research methods hosted by universities and think tanks including Univ. of Michigan, Univ. of California San Francisco, Univ. of California San Diego, Univ. of Hawaii, Univ. of Southern California, RAND, and others. A variety of funding options are available through the National Academy of Social Insurance, NIA training grants, and local foundations. The session will describe the topics, costs, and offer resources for more information.

THE RAND SUMMER INSTITUTE

D. Malouf, Labor and Population, RAND, Santa Monica, California

The RAND Summer Institute consists of two annual conferences that address critical issues facing our aging population, sponsored by the National Institute on Aging and the NIH Office of Behavioral and Social Sciences Research. The two conferences, the Mini-Medical School for Social Scientists and the Demography, Economics, and Epidemiology of Aging, feature distinguished speakers from across scientific disciplines. This symposium will provide an overview of the RAND Summer Institute and will highlight training opportunities available to persons working in the field of aging who hold a Ph.D. or have completed two years of a Ph.D. program.

SESSION 890 (SYMPOSIUM)

VITAMIN D AND PRECURSORS TO DISABILITY: POTENTIAL PATHWAYS FOR DECLINE AND RECOVERY IN OLDER ADULTS

Chair: *G. Hicks, Physical Therapy, University of Delaware, Newark, Delaware*

Discussant: *D.K. Houston, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

Disability prevention is a key goal of geriatricians and aging researchers. Recent epidemiologic literature suggests that vitamin D status is linked to multiple poor outcomes on the pathway to disability in older adults. The goal of this symposium is to highlight recent work exploring the longitudinal relationships between vitamin D and impor-

tant intermediary health outcomes along the pathway towards disability in community-dwelling older adults. Using data from the Health, Aging and Body Composition study, a prospective cohort study of older adults who were healthy upon enrollment, the first paper will determine the associations between vitamin D status, race and inflammation. Using data from the InChianti study, a prospective cohort study of older Italians, the second paper will examine associations of vitamin D status with muscle composition and strength over a six-year period of time. The third paper will use data from the Women's Health and Aging Study II, a prospective cohort study of highly functioning women, to evaluate vitamin D as a predictor of incident frailty. Using InChianti data, the fourth paper will examine the associations of vitamin D status with frailty transitions. Lastly, the final paper will use data from the Baltimore Hip Studies fourth cohort to assess the relationship between vitamin D and recovery of walking ability in the year following a hip fracture. The overall findings of these papers suggest that vitamin D is an important biomarker that should be considered when evaluating both declines and improvement in health status of older adults.

LONGITUDINAL ASSOCIATIONS OF VITAMIN D WITH MUSCLE COMPOSITION AND STRENGTH: THE INCHIANTI STUDY

G. Hicks¹, M. Shardell², R.R. Miller², D. Alley², A. Cherubini³, S. Bandinelli⁴, L. Ferrucci⁵, 1. *Physical Therapy, University of Delaware, Newark, Delaware*, 2. *University of Maryland School of Medicine, Baltimore, Maryland*, 3. *Institute of Gerontology and Geriatrics, University of Perugia Medical School, Perugia, Italy*, 4. *Laboratory of Clinical Epidemiology, INRCA Geriatric Dept., Florence, Italy*, 5. *Clinical Research Branch, National Institute on Aging, Baltimore, Maryland*

Aging-associated reductions in vitamin D [25(OH)D] have been implicated as a potential reason for the deleterious changes in muscle composition and strength among the elderly. We examined the association of baseline 25(OH)D with lower leg muscle mass, strength and quality over a six-year period of time. Analyses included 830 participants aged ≥ 65 years from the InChianti study. Muscle mass of the lower leg was measured using quantitative computed tomography. Ankle dorsiflexion strength was measured using dynamometry. Generalized estimating equations adjusting for covariates were used. In unadjusted models, low baseline levels of serum 25(OH)D ($<25\text{nmol/L}$) were associated with reduced muscle mass, strength and quality over time ($p<.001$). In fully adjusted models, low baseline levels of 25(OH)D were still associated with reduced muscle strength over a six-year time-period ($p=.008$). Further clarification of the role of 25(OH)D in muscle strength decline will provide greater insight into the development of strategies for disability prevention.

VITAMIN D STATUS AND RISK OF INCIDENT FRAILTY: THE WOMEN'S HEALTH AND AGING STUDY (WHAS) II

P.H. Chaves¹, Q. Xue¹, S. Yasar¹, J.D. Walston¹, L.P. Fried², 1. *Johns Hopkins University, Division of Geriatrics, Baltimore, Maryland*, 2. *Columbia University, New York City, New York*

Whether low vitamin-D levels contribute to frailty development, a major geriatric syndrome, is not known. Building on previous cross-sectional studies, we examined the relationship between vitamin D status and incident frailty in community-dwelling older women. Data are from WHAS II (1994-2008). Frailty was defined according to a validated phenotype. Vitamin-D status based on serum 25-OH-vitaminD (radioreceptor assay): deficiency ($<15\text{ng/mL}$), insufficiency ($15\text{--}30\text{ng/mL}$), and normal ($>30\text{ng/mL}$). Follow-up: up to 11 years. Sample size: 373. Cumulative frailty incidence per baseline vitamin-D status: deficiency: 37% ($n=31$); insufficiency: 20% ($n=47$); and normal: 17% ($n=10$). Adjusted relative risk for incident frailty was 2.4 ($p<.05$) and 1.4 ($p=.398$) times higher in those with deficiency and insufficiency, respectively, as compared to those with normal vitamin-D. Vitamin-D deficiency was associated with a substantial increase in frailty devel-

opment risk. These data are in support of trials to assess the efficacy of vitamin-D deficiency correction in preventing frailty in older adults.

ASSOCIATION OF 25(OH)D LEVELS WITH DECLINE AND RECOVERY FROM THE PREFRAIL STATE: THE INCHIANTI STUDY

M. Shardell¹, G. Hicks², R.R. Miller¹, D. Alley¹, A. Cherubini³, S. Bandinelli⁴, L. Ferrucci⁵, 1. *University of Maryland School of Medicine, Baltimore, Maryland*, 2. *University of Delaware, Newark, Delaware*, 3. *Institute of Gerontology and Geriatrics, University of Perugia, Perugia, Italy*, 4. *Tuscany Regional Health Agency, Florence, Italy*, 5. *Longitudinal Studies Section, Clinical Research Branch, National Institute on Aging, Baltimore, Maryland*

Relationships of low vitamin D [25(OH)D] with frailty have been reported. No work has examined whether vitamin D status is associated with positive or negative transitions from a prefrail state. Analyses included 310 prefrail participants aged ≥ 65 years from the InChianti study. Frailty was defined as presence of ≥ 3 of the 5 following criteria: slowness, weakness, sedentariness, exhaustion, and weight loss. Robustness and prefrailty were defined, respectively, as presence of zero and 1-2 criteria. Logistic regression adjusting for covariates was used. Serum 25(OH)D was associated with transitions from prefrailty ($p=0.02$). Those with 25(OH)D $>50\text{nmol/L}$ were more likely to become robust ($\text{OR}=2.14$, $95\%\text{CI}=0.85, 5.42$) and less likely to become frail ($\text{OR}=0.27$, $95\%\text{CI}=0.08, 0.94$) than remain prefrail compared to those with 25(OH)D $<25\text{nmol/L}$. Lower 25(OH)D was associated with incident frailty, and higher 25(OH)D was associated with recovery from prefrailty. Additional research examining vitamin D and physical recovery is warranted.

LONGITUDINAL ASSOCIATIONS OF SERUM VITAMIN D LEVELS WITH RECOVERY OF WALKING ABILITY FOLLOWING HIP FRACTURE: THE BALTIMORE HIP STUDIES

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Serum levels of vitamin D [25(OH)D] are associated with neuromuscular function in older adults, and 25(OH)D levels at the time of hip fracture are associated with recovery of lower extremity function. Whether 25(OH)D levels relate to recovery of walking ability in the year post fracture is not known. Analyses included 100 women with incident hip fractures from the fourth Baltimore Hip Studies cohort. We examined the association of 25(OH)D levels with 6-minute walking distance (6MWD) at 2, 6 and 12 months post fracture using generalized estimating equations. Adjusting for covariates, each additional nmol/L of 25(OH)D, was associated with longer 6MWD by 0.7m ($95\%\text{CI } 0.1\text{m}, 1.3\text{m}$), 0.7 ($95\%\text{CI } 0.1\text{m}, 1.4\text{m}$) and 0.7m ($95\%\text{CI } 0.1\text{m}, 1.3\text{m}$) at 2, 6 and 12 months, respectively. Serum 25(OH)D levels were positively associated with walking ability following hip fracture. Vitamin D supplementation may represent an opportunity for intervention.

25-HYDROXYVITAMIN-D, INFLAMMATION, AND RACE IN HEALTH ABC

K. Shea¹, D.K. Houston¹, J. Tooze¹, D.B. Hausman², M. Johnson², D.C. Bauer³, T. Harris⁴, S. Kritchevsky¹, 1. *Wake Forest University School of Medicine, Winston-Salem, North Carolina*, 2. *University of Georgia, Athens, Georgia*, 3. *University of California San Francisco, San Francisco, California*, 4. *National Institute of Aging, Bethesda, Maryland*

We examined the association between serum 25-hydroxyvitamin-D [25(OH)D] and inflammation in 947 black and 1510 white [mean \pm SD

25(OH)D= 52±26nmol/L and 72±27nmol/L, respectively] community-dwelling participants of Health ABC (mean age 75yrs, 50% female). After controlling for age, sex, BMI, and season, serum 25(OH)D was correlated with the inflammatory markers C-reactive protein (CRP) ($r = -0.06$, $p = 0.006$), interleukin-6 (IL-6) ($r = -0.09$, $p < 0.001$), TNF-alpha (TNFα) ($r = 0.04$, $p = 0.048$), and plasminogen activator inhibitor-1 (PAI-1) ($r = -0.04$, $p = 0.038$). Blacks had higher CRP and IL-6 and lower TNFα and PAI-1, compared to whites (all $p < 0.01$), adjusted for age, sex, BMI, co-morbid disease, and medication use. Further adjustment for 25(OH)D attenuated the racial difference in IL-6 only ($p = 0.11$). Race and 25(OH)D are independently associated with PAI-1 (both $p < 0.001$). The racial difference in IL-6 is confounded by 25(OH)D. The inverse associations between 25(OH)D and IL-6 and PAI-1 may partially explain the observed associations between 25-hydroxyvitamin-D and age-related diseases

SESSION 895 (SYMPOSIUM)

SRPP PRESIDENTIAL SYMPOSIUM: COMMUNITY APPROACHES TO HEALTHY AGING

Chair: A.E. Scharlach, *Social Welfare, University of California, Berkeley, California*

Discussant: M. Ory, *Texas A&M, College Station, Texas*

A growing body of evidence attests to the importance of physical and social environments for promoting healthy aging. Indeed, the environmental docility hypothesis posited by Lawton and Nahemow suggests that contextual features are apt to assume increased importance with age, potentially affecting levels of competence in person-environment interactions, with resultant implications for actual and perceived well-being. Recent years have seen an upsurge of scholarly interest in environmental gerontology, as well as policy efforts to rebalance public expenditures and incentives so as to enable older persons to “age in place” in their own homes, and popular interest in “good places to grow old.” Emerging from these efforts is a focus on the role of community in shaping the challenges and opportunities that individuals encounter as they age. This Symposium examines the community context of healthy aging, and implications for intervention. Andrew Scharlach’s presentation describes a conceptual model of developmentally-constructive community characteristics and an empirically-derived framework for mapping “aging friendly” community change efforts. Edward J. Olson’s presentation examines current challenges in the interface between older adults and their built environment, and provides a vision for physical and technological innovations for healthy aging. William Satariano’s presentation examines environmental factors that affect mobility and health behaviors. Kathryn Lawler’s presentation describes Atlanta’s Lifelong Communities Initiative, an innovative 10-county effort focused on “building a healthy community and a place individuals can live throughout their lifetime.”

FRAMEWORKS FOR CREATING ‘AGING-FRIENDLY’ COMMUNITIES

A.E. Scharlach, *Social Welfare, University of California, Berkeley, California*

This paper reports the results of a comprehensive review of available evidence regarding local and regional initiatives purportedly designed to help communities become more “aging-friendly.” Utilizing keyword searches of available online databases, supplemented with follow-up contacts, 272 local initiatives were found that identified themselves as “aging-friendly,” “elder-friendly,” “age-friendly,” “communities for all ages,” “livable communities,” etc. Content analysis of available data yielded five domains: 1. target systems (e.g., housing, transportation, health care, productivity) 2. focal areas (e.g., physical infrastructure, social infrastructure, technological infrastructure) 3. inclusiveness (e.g., age-segregated vs. age-integrated) 4. community-change processes (e.g., community planning, locality development, social action) 5. intended goals (e.g., individual well-being, organizational capacity

development, culture change) The types of innovations within each domain, and the balance among them, serve to differentiate the various “aging-friendly” initiatives. This framework provides a conceptual foundation for evaluating outcomes attributable to specific goals, mechanisms, and processes.

CREATING LIFELONG COMMUNITIES: LESSONS FROM THE ATLANTA REGION

K. Lawler, *Atlanta Regional Commission, Atlanta, Georgia*

The rapidly growing older adult population is already reshaping most communities whether they are prepared or not. The Atlanta Regional Commission as the Area Agency on Aging and the Metropolitan Planning Organization for the 10 county area quickly found that it was at the center of this major demographic shift and had to develop a comprehensive response that could match the scale of the change. ARC’s Lifelong Communities Initiative is a multi-year project to create local, cross disciplinary partnerships in each of the region’s counties to work toward three goals: promoting housing and transportation options, encouraging healthy lifestyles and expanding information and access. While the emphasis is on the needs of the older adult population, the goal is to design and implement solutions that benefit people of all ages. The session will discuss the process employed including the recent Lifelong Communities charrette and the successes and ongoing challenges of this work.

INSIGHTS REGARDING HEALTHY COMMUNITY AGING

E. Olson, *E. J. Olson & Associates, Milwaukee, Wisconsin*

This presentation will highlight the exciting dynamics of the 21st century that are fostering more independence and self determination for older adults. Dramatic technological innovations include modifications to the built-environment, new care-giving models, and a focus on person-centered technologies. As a by-product of these changes, the “boomer generation” will dramatically modify the continuum of care which will be consumer focused and defined in terms of needed services. Because of the transformative era in which we live, the session will discuss evidenced-based research of the Robert Wood Johnson (RWJ) Pebbles Initiative, results of RWJ’s research on the Eden Alternative and Green House models which emphasize households within neighborhoods, highlight the Massachusetts Institute of Technology Living House, Cambridge, MA which profiled a “Smart Environment”, and discuss environment-based technology within the framework of post-occupancy evaluations of designs for older adults.

AGING, HEALTH BEHAVIOR, AND THE ENVIRONMENT

W. Satariano, *University of California - Public Health, Berkeley, California*

Environmental factors, e.g., home and neighborhood design, have been found to be associated with health behaviors, such as diet, nutrition, and physical activity, in older populations. Different strategies, such as Geographic Information Systems, environmental audits, and personal interviews have been used to examine these associations. We will review some of the key findings in this area and examine the methods used to conduct this research. Special attention will be given to the specific contributions made by each type of research method. New directions for research and the implications of that research for practice and policy will also be addressed.

SESSION 900 (SYMPOSIUM)

CONTEXTUAL FACTORS INFLUENCING GERIATRICS EDUCATION AND EVALUATION IN RURAL AND URBAN LOCALES

Chair: J. Manchester, *Case Western Reserve University, Cleveland, Ohio*
Discussant: J. Rose, *Case Western Reserve University, Cleveland, Ohio*

This symposium will give participants an understanding of geriatrics education programming and evaluation issues in rural and urban social contexts. As faculty from these locales will present related challenges in health professions programming, attendees will be better equipped to identify contextual factors in their own operations and account for them in evaluation planning. Rural and urban-based educational programs vary in their ability to demonstrate results. This condition stems from relational and organizational systems factors inherent to these settings. The quality of partnerships may be enhanced in urban environments due to proximity; however, community partners (hospitals, care facilities) may compete for consumers and funding outside of mutual programming. The quantity of partners, important in expanding access to trainees and patients, may be limited in rural areas due to geography. However, quality partnerships facilitate reliable programming over time in these settings; this may override the actual number of partners as a capacity factor and speak to the developmental phase of a geriatrics education effort. These programmatic and evaluation challenges will be discussed using systematic and systemic (contextual) elements. Relational and organizational components (access to faculty and measurable groups) are proposed to influence systematic factors (trainee skills lead to field practice in educational or clinical settings). Systematic components will be illustrated with systemic (relational and organizational) accompaniments. Implications for analyzing data to include contextual factors and collecting data with and for partners to enhance programming and evaluation will be discussed.

USING RURAL AND URBAN CONSTELLATIONS TO FACILITATE DISCOVERY IN GERIATRICS EDUCATION

J. Manchester, *Case Western Reserve University, Cleveland, Ohio*

The presentation will examine contextual factors that influence programming and evaluation activity within geriatrics education, specific to rural and urban distinctions. Understanding partnering and organizational elements that influence delivery and outcomes will allow participants to enhance evaluation plans in these settings. When such factors are known, issues of measurement (data collection and analysis) or adequate stakeholder recruitment can be proactively addressed. Participants will gain knowledge on applying a systemic logic model that illustrates contextual factors pertinent to health professions programming in rural and urban contexts.

EVALUATION PLANNING AND IMPLEMENTATION IN A STATEWIDE GERIATRIC EDUCATION CENTER CONSORTIUM: RELEVANT FACTORS IN A RURAL-URBAN MODEL

J.L. Howe, *Mt. Sinai School of Medicine, New York, New York*

The Director of The New York Consortium of Geriatric Education Centers (CNYGEC), based at Mount Sinai School of Medicine, New York City, will present a logic model pertinent to education programming in a geographically diverse State ranging from Central New York rural areas to the densely populated metropolitan New York City area. The scope of logic model planning, program implementation and measurement is influenced by contextual factors such as statewide consortium partnerships, private and public funding streams, and travel and seasonal considerations. Other considerations impacting evaluation planning and implementation include lack of validated outcome measures for training programs and partner compliance with data collection plans. Finally, contextual challenges in identifying and working with partner clinical sites for patient outcome data in both urban and rural settings

will be discussed. Participants will be able to identify opportunities, challenges, and solutions in program evaluation based on the experiences of the CNYGEC.

GERIATRIC EDUCATION IN FRONTIER ALASKA: CAPACITY BUILDING AND HYBRID MODELS OF DEVELOPMENT

R.M. Rosich, *Psychology/AKGEC, University of Alaska Anchorage, Anchorage, Alaska*

Delivering programming through statewide outreach in Alaska is dependent upon advantageous relational and organizational factors. The Director of the Alaska Geriatric Education Center at the University of Alaska will discuss contextual facets as they influence GEC programming with rural/bush outreach. The scope of faculty development logic model planning, program implementation and measurement are influenced by contextual factors germane to a rural/bush context. For example, the level of participation among consortium partner sites and, in turn, the comprehensiveness of evaluation plans, is influenced by these contextual variables. Participants will learn to identify contextual facets and apply them in their own planning. The value in identifying developmental phases of GECs for capacity building, using such data, will be discussed.

IMPACT OF CONTEXTUAL FACTORS ON GERIATRIC EDUCATION FOR HEALTHCARE PROFESSIONALS IN AN URBAN MULTI-SITE SETTING

E. O'Toole, K. Ondus, *Case-MetroHealth, Cleveland, Ohio*

Implementing education and training in multiple competing healthcare systems in close proximity and in association with one academic institution is fraught with challenges including varying approaches to educational programs and their evaluation. The relational and organizational factors that impact the standardization of curricula and practitioner/patient-level evaluation in this context will be reviewed and approaches to addressing these issues will be discussed. Participants will be able to identify how contextual factors in an urban environment both facilitate and inhibit aspects of program development and evaluation planning. Participants are invited to share their strategies and experience.

SESSION 905 (PAPER)

INCREASING SATISFACTION AND QUALITY OF LIFE IN RESIDENTIAL CARE

INSTITUTIONAL AND COMMUNITY SUPPORTIVE HOUSING: RESIDENT EXPERIENCES OF QUALITY AND SOCIAL ISOLATION

J. Robison¹, I. Reed¹, N. Shugrue¹, N. Thompson¹, P. Smith², C. Gruman^{3,1}, 1. *University of Connecticut Health Center, Farmington, Connecticut*, 2. *Connecticut Center for Healthy Aging, New Britain, Connecticut*, 3. *The Lewin Group, Falls Church, Virginia*

An extensive literature on nursing home residents has accumulated, together with a smaller body of work examining various community-based long term care settings. However, little research to date has compared the experiences of residents of various supportive housing types using identical measures. This study compares residents of three types of supportive housing types on their assessments of quality of care, quality of life, emotional well-being and social isolation. Specifically, we look at differences between community and institutional settings as well as differences across the two community settings. Data come from 150 interviews with residents of 57 nursing homes, assisted living communities, and residential care homes, part of the statewide 2007 Connecticut Long Term Care Needs Assessment. Residents of assisted living, residential care homes, and nursing homes differ on multiple dimensions. Controlling for demographic differences, residents of these three types

of supportive housing do not differ significantly on their assessments of quality of care, emotional well-being, or social isolation. Assisted living and residential care home residents have significantly more privacy than those in nursing homes ($p < .05$), but give similar assessments of dignity and autonomy. While community-based housing as a general concept may be preferable to institutional settings, individual experiences across these settings vary, with important policy implications.

“HOME IS HOME, BE IT EVER SO HUMBLE”: NEW SENIOR HOUSING RESIDENTS’ PERCEPTIONS OF FACILITY LIFE

H. Ewen, J. Chahal, P.P. Brown, *Sociology and Gerontology, Miami University, Oxford, Ohio*

The loss of familiar social and neighborhood ties can be disconcerting for older adults who move into senior housing. With time, new social and environmental connections are established within the facility and surrounding community. This paper presents findings on a panel study of 30 women who relocated to senior housing facilities from their own homes in the greater community in 2005-2007. Movers reported on characteristics of multiple facets of their new home: privacy, sense of belonging, social outlets, and environmental control. Qualitative and quantitative analyses were used to analyze the data. Results of this mixed-method study show that six months after relocation, most movers report a sense of connectedness to others and overall satisfaction with their new living arrangements. Unwritten social rules and established social cliques exist, but most movers were able to establish their own friendships and sense of belonging. A mixture of management stipulations and unwritten resident rules provided the foundation for visitation policies and boundaries essential for establishing privacy. A sense of control over the physical environment promoted feelings of competence and feeling at “home”.

LIFE IN AN ELDER COHOUSING COMMUNITY TWO YEARS AFTER MOVE-IN

A.P. Glass, M. Schroeder, *University of Georgia Institute of Gerontology, Athens, Georgia*

ElderSpirit Community (ESC), among the first elder-only cohousing communities in the U.S., blends a unique combination of features, including mutual support, resident management, affordable housing, and both rental and owned units, all within a context of later life spirituality. Older adults proactively chose to move into ESC beginning in 2006. As part of a mixed methods longitudinal analysis, we report on the status of ESC in 2008. Through qualitative interviews with the 33 “charter residents,” who were white, 79% female, and averaged 72.1 in age (range = 65-86), we developed a model of how they defined “sense of community.” Five themes emerged: Belonging, Companionship, Mutual Support, Meaningful Relationships, and Unity/Higher Purpose. Residents strongly agreed on feeling a sense of belonging at ESC. Mutual support is another value of ESC, and it was found that, with one exception due to health problems, all residents reported both giving and receiving help, with a mean of 7.6 types of neighboring behaviors provided and 5.3 types received. Listening and providing information were among the most common, with hands-on care the least. Six respondents reported improvement in physical health from the year before and four worsened; nine reported improvement in mental health with only one reporting worse mental health. Some challenges of living “in community” are discussed, such as decision making by consensus. Based on 28 variables, mean resident satisfaction overall was 118 out of a possible 140 (range = 84-139), and was particularly high in aspects such as convenience, security, dignity, and mutual support.

SATISFACTION WITH CARE AMONG CANADIAN ASSISTED-LIVING TENANTS

H. Cooke, S. Baiton-Wilkinson, *Fraser Health Authority, Vancouver, British Columbia, Canada*

Satisfaction surveys provide a means of integrating and utilizing the perspectives of those involved in the continuum of elder care and can therefore serve as potent tools for improving service delivery. To date, few large-scale satisfaction surveys (none in Canada) have been used to assess tenant satisfaction with assisted living. In 2008, assisted-living tenants in one the largest health authorities in British Columbia, Canada participated in an inaugural Tenant Satisfaction Survey. Adapted from the Ohio Department of Aging Resident Satisfaction survey, the survey consisted of 42 questions in 10 domains (Activities, Choice, Care/Services, Staff Relations, Staff Responsiveness, Communications, Meals/Dining, Laundry, Building Environment and Resident Environment). A series of demographic questions were also included. Surveys were mailed to 1,150 tenants at 27 assisted-living sites; 798 surveys were received (69.4% response rate). Tenants who were older, had less education, had better perceived health and who lived in a smaller residence reported higher levels of satisfaction. Mean satisfaction scores were highest for the Choice and Resident Environment domains and lowest for the Activities and Meals/Dining domains. Smaller residences (<25 units) had significantly lower mean scores on the Activities domain than those of medium or large sized residences. Survey results suggest that a mail-out survey is a practical and affordable option for soliciting tenant feedback in assisted living.

FAMILY COMMENTS ON NURSING HOMES: A LONGITUDINAL ANALYSIS OF FOUR WAVES OF FAMILY SATISFACTION DATA

S. Mwangi¹, H. Baker^{2,1}, *1. Miami University, Oxford, Ohio, 2. Muskingum College, New Concord, Ohio*

In 2000, 2002, 2006, and 2008, nursing homes within the state of Ohio received family satisfaction surveys from the Ohio Department of Aging. Facilities then sent the surveys to their current residents’ responsible parties (e.g. spouses, children, friends). The responsible parties returned the surveys to the Scripps Gerontology Center for analysis. An examination of each returned family satisfaction survey was checked for additional comments written by the respondents on the survey. The comments are logged and qualitatively coded based on themes identified by the researchers. For example, 2008 data, 5,341 comments from 1,682 surveys were logged and coded based on themes used by the researchers. The researchers qualitatively analyzed how these themes and number of family comments have changed over time. For example in previous surveys, clarification of a response to an item was the most frequent comment. However in 2008, family complaints about care was the most frequent type of comment. By examining the trends in family satisfaction surveys for Ohio nursing homes, insight is gained into the views and expectations of long-term care consumers. How such views and expectations have changed over time also may help inform professionals and researchers of the industry’s past, present, and future from the consumer’s standpoint.

SESSION 910 (SYMPOSIUM)

RELIGION AND SPIRITUALITY: FROM DEFINITION AND VARIABLE TO PRACTICE APPLICATION

Chair: *J.W. Ellor, School of Social Work, Baylor University, Waco, Texas*
Discussant: *F. Netting, Virginia Commonwealth University, Richmond, Virginia*

The last 15 years have exploded with research to define and then discover the role of religion and spirituality as a variable in gerontological research, however the work to integration these definitions and the data from the variables into direct practice has lagged behind. The traditional infusion of religious and spiritual values, symbols and behaviors

employed principles of faith and practice. This allowed practitioners to bring subjective and often personal beliefs into the workplace. In today's evidence based practice environment little effort seems to be expended to use research based definitions and variables to relate to the practice outcomes in the field. This symposium will present three different studies that reflect religious and spiritual variables in direct practice in palliative care, group practice and spiritual assessment. Discussion in each presentation will reflect the definitions used the aspects of practice impacted and the outcomes of religion and spirituality in the various contexts. The discussant will then draw the dialogues together in an effort to further the impact of the research in the area of religion and spirituality on direct practice.

ASSESSING SPIRITUAL DISTRESS IN ELDERLY PATIENTS UNDERGOING REHABILITATION

S. Monod¹, E. Rochat¹, B. Spencer², C.J. Bula¹, 1. *Service of Geriatrics, University of Lausanne Medical Center, Lausanne, Switzerland*, 2. *University Institute of Social and Preventive Medicine, Lausanne, Switzerland*

Spiritual distress has been associated with worse health outcomes. Assessing patient's spirituality seems especially relevant in older patients undergoing post-acute rehabilitation. However, few instruments are designed to assess spiritual distress. The objectives of this research were 1) to conceptualize the spiritual dimension and to develop an instrument to assess spiritual distress in hospitalized older patients; 2) to determine spiritual distress prevalence and to investigate its relationship with rehab outcomes. A qualitative approach was used to develop the Spiritual Distress Assessment Tool (SDAT). The SDAT is a semi-structured interview that assesses unmet spiritual needs, and quantifies spiritual distress. In a pilot study among rehab patients (N=69, 82.5±8.3 years), 61% reported spiritual distress. Compared to the others, these patients had more functional impairment and tended to have longer stay. Further studies are needed to determine whether spiritual intervention would be effective to address spiritual distress and improve health outcomes.

A PSYCHO-SPIRITUAL INTERVENTION FOR LATE-LIFE SUFFERING

J.M. Thibault, *Family and Geriatric Medicine, University of Louisville, Prospect, Kentucky*

Late life often brings suffering that can neither be resolved nor mitigated with the most advanced medical interventions. Many religions have spiritual disciplines that could be used in medical settings; meditation is one that has produced evidence of its positive effects on health. The practice described in this paper, the "Dedicated Suffering Group" is the use of an ancient Catholic devotional practice historically referred to as 'offering it up', as a psycho-spiritual intervention for unresolved physical and emotional suffering. When used in long term care settings, where pain and suffering are rampant, the results have included decreased self-absorption, increased socialization, and a renewed sense of meaning and purpose among the participants.

IMPROVING THE QUALITY OF SPIRITUAL CARE IN PALLIATIVE CARE: CONSENSUS PROJECT REVIEW

H. Nelson-Becker¹, B.J. Kramer², 1. *Department of Social Welfare, University of Kansas, Lawrence, Kansas*, 2. *University of Wisconsin-Madison, Madison, Wisconsin*

The National Consensus Project guidelines for standards in palliative care were released in 2004. Spiritual, religious and existential aspects of care were identified as one of the eight domains essential for quality palliative care. A recent Consensus Document and Conference on "Improving the Quality of Spiritual Care as a Dimension of Palliative Care," sought to "establish a common language for spiritual care, identify resources that have practical applications, and develop recommendations that will advance the practice of spiritual care." Initial disciplinary orienting definitions led to creation of a new definition of

spirituality. This presentation will describe the development of the Consensus Document, highlight a spiritual model of care, and discuss the seven essential elements of spiritual care addressed by the Conference. Implications for practical implementation will be emphasized, with attention to spiritual assessment tools and practice principles. The website for the document will be provided.

USE OF SPIRITUAL LIFE MAPS IN A HOSPICE SETTING

S.Y. Bushfield, *School of Social Work, New Mexico State University, Las Cruces, New Mexico*

Spiritual care is an essential component of holistic hospice care at the end of life. However, hospices vary considerably in the process of spiritual assessment as a precursor to spiritual care. The Spiritual Life Map (Hodge, 2006) is one tool which has been developed to address diverse spiritual perspectives. Introduction and adoption of such a tool may require training and ongoing support to facilitate its use in a hospice setting. This qualitative study evaluated the introduction, demonstration, and use of Spiritual Life Maps in a hospice setting. Focus groups with hospice chaplains and social workers were conducted to assess hospice professionals' definitions of spiritual care and their responses both before and after hands-on training in the use of Spiritual Life Maps as a tool in end of life care. Results suggest the need for ongoing training and support in addressing spiritual needs at the end of life. Implications for research, training and practice are discussed.

SESSION 915 (POSTER)

THE LONG TERM CARE WORKFORCE - SRPP POSTER SESSION

NURSING HOME CHARACTERISTICS AND THE AVAILABILITY OF BENEFITS FOR NURSING ASSISTANTS

A. Temple², D.J. Dobbs¹, R. Andel¹, 1. *University of South Florida, Tampa, Florida*, 2. *James Madison University, Harrisonburg, Virginia*

In the nursing home (NH) setting, limited availability of employment-based benefits is a significant factor affecting the recruitment and retention of nursing assistants (NAs). This study explored the presence of benefits available to NAs and investigated NH organizational characteristics associated with benefits offered to these staff. Cross-sectional data on 944 nationally representative NHs were derived from the 2004 National Nursing Home Survey. Benefits were measured as a continuous variable weighted by cost to employers. Ordinary least squares regression was used to examine associations between NH organizational characteristics and NA benefits. The results indicate that for-profit ownership and Medicaid occupancy were negatively associated with NA benefits ($p < .05$). Chain membership, bed size, occupancy rate, union presence, and education of the nursing home administrator were positively associated with benefits of NA staff ($p < .05$). The findings suggest that organizational characteristics may explain some of the variation in the availability of NA benefits across the NH industry and may be informative for policy and practice to improve NA staff recruitment and retention. In particular, facilities with for-profit ownership and high proportions of Medicaid residents should consider cost-effective ways to enhance the benefit package offered to NAs.

QUALITY OF CARE: IMPACT OF NURSING HOME CHARACTERISTICS ON NURSE STAFFING LEVELS

H. Lee, C. Harrington, M.A. Blegen, *UCSF School of Nursing, San Francisco, California*

Inadequate staffing levels in nursing homes have long been a policy concern in the United States. The main purpose of this study was to better understand the relationship between nursing home characteristics and quality of care. This paper presented the first aim of the study, which identified important predictors that affected nursing staffing lev-

els considering organizational characteristics, resources, resident, and market characteristics. This study used secondary data from Online Survey Certification and Reporting (OSCAR) data, Minimum Data Set (MDS) 2.0, quarterly staffing data from the state inspections, and Area Resource File (ARF). The population of 195 nursing homes out of 199 Colorado freestanding homes in 2000 was analyzed. Two-stage least squares regression and ordinary least squares regression models were used for data analysis. For-profit and chain-affiliated nursing homes provided less total staffing hours per resident day (hprd). Larger nursing homes also provided less RN and total staffing hprd, as well as lower RN skill mix. Higher Medicaid reimbursement rates were associated with higher RN hours, RN skill mix, and total hours when other factors were controlled. The number of RNs in the Health Services Area was negatively associated with RN hours and RN skill mix in nursing homes when endogeneity and other factors were controlled. Given the findings, this study concluded that (1) quality of care in nursing homes was highly dependent upon resources from the external environment, (2) Medicaid reimbursement rates and proportion of Medicare residents were critical resources for nurse staffing levels in nursing homes.

THE PERCEPTIONS OF THE JAPANESE NURSING CARE WORKERS ABOUT ACCEPTING FOREIGN CARE WORKERS

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Japan accepted 104 nursing care workers from Indonesia in August 2008, and is expected to accept 300 more from the Philippines at the end of April 2009. The purposes of this nationwide mail survey, funded by the Mitsubishi Foundation were to explore how they would perceive accepting foreign care workers in their institutions, to find out what kinds of concerns they would have, and to determine what sorts of preparations that may be needed to accept them. The nationally representative survey data, in which the respondents were nursing care workers (N=577, the response rate: 26.5%) across the country, collected in March through April 2008, were analyzed for this presentation. Preliminary analyses revealed that 79.5% of the nursing care workers responded that they "would not object to working with foreign care workers, if there were no other choices." For those nursing care workers who responded in this way, the "personality of foreign care workers" (90%), was cited as the most important quality in forming their opinions, followed by the "attitudes toward work" (79%). Moreover, almost all Japanese nursing care workers (99.7%) expressed their concerns about working with foreign care workers, and their biggest concern was that they "would not be skilled enough to communicate smoothly with older people, their family members and colleagues" (96%), followed by "the misunderstanding and troubles that are likely to be caused because of different values, living and eating habits and religions" (81%) and "a lack of the writing and reading abilities in the Japanese language" (76%).

THE RELATIONSHIP BETWEEN CHARACTERISTICS AND TURNOVER RATE OF NURSING FACILITIES IN JAPAN

R. Hata, K. Masuda, M. Shirasawa, *Graduate School of Social Welfare, Osaka City University, Osaka, Japan*

In Japan, as population aging has been rising, nursing facilities are required to provide high quality care. However, the high turnover rate of staff in nursing facilities makes it difficult for them to provide this high quality care. This study aims to clarify the relationship between the characteristics of nursing facilities and the turnover rate of staff in nursing facilities, and to determine what kind of working environment is needed to improve the retention rate of the staff of nursing facilities. The research design was a cross-sectional survey using mailed questionnaires. Participants in this study were managers of 527 nursing facilities in Osaka prefecture. The response rate was 29.6 % (N=156). The turnover rate is as following: very high, 4.1%; high, 47.6%; low, 40.4%; very low, 4.8%. As a result of factor analysis, the situations of the facil-

ities the managers addressed were composed of the following 5 categories: (1) Relationships within and outside of their workplace, (2) System of staff's training, (3) Working conditions, (4) Supporting system of the staff at their workplace, and (5) Respect for the staff as individuals. The turnover rate was significantly related to relationships within and outside of their workplace, $t(136) = -2.87, p < .01$, and working conditions of the staff, $t(141) = -3.21, p < .01$. Consequently, maintaining good personal relationships within and outside of their workplace, receiving a good evaluation from facilities users and the region, and improving salary and benefit programs will be effective in improving the retention of the staff.

RELATIONSHIP BETWEEN CHARACTERISTICS OF HOME HELPERS' AGENCIES AND THE TURNOVER RATE OF HOME HELPERS

M. Shirasawa, R. Hata, K. Masuda, *Osaka City University, Osaka, Japan*

Although population aging is increasing in Japan, the situation is that home helpers' turnover rate is high and agencies are having difficulty retaining them. The purpose of this research is to clarify what kind of workplace environment is needed for the home helpers to remain employed for a long term. The research design was a cross-sectional survey using mailed questionnaires. Participants in this study were 1191 managers of home helper agencies in Osaka city. The response rate was 35.9 % (N=428). According to the results, the turnover rate of the agencies is as follows: very high, 4.0%; high, 26.6%; low, 38.6%; very low, 28.5%. Using factor analysis, the work situations that the managers addressed were categorized into the following four factors: (1) Improving staff training, (2) Benefit programs, (3) Working conditions, and (4) Relationships outside of the agency. The turnover rate was significantly related to only "working conditions" $t(408) = 1.560, p < .001$. Consequently, it was found that establishing a good relationship with supervisors and co-workers, establishing benefit programs such as paid holidays, and having a fair evaluation of an employee's performance will lead to improving the continuous retention of a home helper's workforce. In order to improve the working conditions at these agencies, the agencies are requested to reconsider the position of the supervisors who guide and support the home helpers, and to make administrative operations clear. If these are improved, the retention rate of the home helper's workforce will be high.

AN INVESTIGATION OF STATE DIFFERENCES IN THE HOME CARE WORKFORCE

J. Deichert, K. Kosloski, L. Holley, *Gerontology, University of Nebraska at Omaha, Omaha, Nebraska*

Home care workers typically comprise two distinct populations that provide very different types of services. Home health aides (typically credentialed) help with ADLs, personal care, and perform clinical procedures such as changing bandages or taking blood pressures and, in some states, administering oral medications. Companion and home care aides (typically un-credentialed) generally provide companionship and custodial care, and may perform housekeeping chores, meal preparation, and the like. The present study examines the proportional distribution of these two types of workers by state, and seeks to explain the large discrepancies between states in the distribution of these workers. Specifically, New York, North Carolina, and Ohio, with greater than 70% home health aides (n=210,111), were compared to California, Washington, Vermont and Oregon, with fewer than 30% home health aides (n=209,794). This study uses the 2005-07 American Community Survey Public Use Microdata Sample which is large enough to provide reliable estimates at the state level. The findings show that states with a large proportion of un-credentialed workers had workers who were more likely to be employed by government or self-employed, and less likely to work at for-profit businesses such as home health care agencies. Workers in these states also were more likely to be non-African-American, speak some language other than English, be part-time work-

ers, and earn less than credentialed workers. Demand characteristics (e.g., percent of states' population 65 plus or with disability) did not explain the differences among states.

CRIMINAL HISTORY SCREENING FOR LONG-TERM CARE WORKERS: FINDINGS FROM THE CMS PILOT PROGRAM EVALUATION

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This presentation will discuss findings from the evaluation of the Background Check Pilot Program, a Congressionally-mandated demonstration that examined issues related to background check screening requirements for long-term care employees with direct patient access. Seven States participated in the pilot program: Alaska, Idaho, Illinois, Michigan, Nevada, New Mexico, and Wisconsin. A major goal of the pilot was to improve on the type of screening done on direct patient access workers by requiring fingerprint-based State and national criminal records checks. While the legislation that established the pilot program specified certain required elements of background checks, States had considerable flexibility with respect to many policies and procedures. States varied with respect to the types of providers and employees for whom background checks were required, the types of disqualifying crimes, the types of information that was disseminated to employers, and appeal policies. Understanding these differences and how they contributed to the effectiveness and efficiency of State programs was a critical component of the evaluation. The evaluation focused on a set of evaluation topics specified by the legislation that created the pilot, including identifying the most efficient and effective procedures for conducting background checks, determining the extent to which background checks result in unintended consequences, such as a reduction in the size of the available workforce, assessing the costs of conducting background checks, considering issues related to whether employers or employees should be required to pay for background check costs, and recommending appropriate procedures and payment mechanisms for implementing a national background check program.

NEGOTIATING THE CARING CONTRACT: EXPERIENCES OF AGENCY-DIRECTED AND INDEPENDENT HOME CARE AIDES

J.M. Conahan, *University of Massachusetts Boston, Boston, Massachusetts*

Home care aides, who provide a majority of the nonmedical personal care and homemaking services to older adults, are among the least trained and lowest paid direct care workers. Although they make up one of the most rapidly growing occupational groups, their retention on the job is volatile. Because these paid caregivers work in the largely isolated, unstructured, unregulated environment of the elder's home, there may be ambiguity about the breadth of their responsibility, the boundaries between their domestic and occupational roles, the closeness of their relationships and the worth of their caring work. Little is known about how caregiving aides, particularly independently hired aides whose employers may also be their clients, negotiate their rights and responsibilities on the job. The purpose of this study was to explore the perceptions of home care aides of their negotiation experiences with their clients. The experiences of aides in agency-directed and consumer-directed care structures were compared. This qualitative study involved face-to-face interviews with 15 to 20 home care aides in each of three groups: agency-directed aides, subsidized consumer-directed aides and independent consumer-directed aides. Several themes emerged. Negotiation occurred at objective and emotional levels. Agency rules could pre-empt negotiation. Loss could affect the subsequent negotiation of closeness. Most negotiation was unwritten, much was unspoken. Movement to agency home care and to independent consumer-directed home

care suggested a caregiving trajectory. At a minimum public education about the roles and responsibilities of aides and their clients/employers is needed to improve support for their work life.

EXAMINING THE IMPACT OF CREATIVE AND TRADITIONAL ACTIVITIES ON ENGAGEMENT AND AFFECT BETWEEN OLDER PARTICIPANTS AND LONG-TERM CARE STAFF

J. Rowe, M.Y. Savundranayagam, J. Lang, R. Montgomery, *University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

The integration of creative activities into daily programming at adult day centers is becoming more prevalent. Creative activities are assumed to foster greater engagement and positive affect among older adults with dementia. However, empirical evidence to support the impact of creative activities on outcomes is limited. The goal of this study was to empirically assess the impact of creative activities on adult day center participants' (n=32) level of engagement with and expressed positive affect toward staff. An eight-week observational study recorded elders' interactions with others (n=241) in a sculpture activity, in traditional activities with a creative component and in traditional activities without a creative component. Results revealed staff-participant engagement was significantly higher for those involved in the sculpture activity than those involved in creative or non-creative activities. Participants also expressed significantly more pleasurable affect during interactions with staff in the sculpture activity compared to the other traditional activities. Findings are discussed within the context using creative programming to strengthening the relationships between staff and older adults in long-term care settings.

SESSION 920 (PAPER)

TRAINING AND SUPPORTING NURSING HOME STAFF

NURSING ASSISTANT TRAINING AND CERTIFICATION PROGRAMS WITHIN NURSING HOMES 1997-2007

D. Tyler, H. Jung, Z. Feng, V. Mor, *Center for Gerontology, Brown University, Providence, Rhode Island*

Purpose: The federal government mandates all certified nursing assistants (CNA) receive at least 75 hours of training and be certified before working. Information about whether or not nursing homes (NH) were providing this training and certification in-house began to be collected in 1997. This study describes the changing prevalence of these programs over the past decade, describes differences between NHs that offered training programs continually, those that offered programs intermittently, and those that never offered them, and characterizes interstate differences in the prevalence of such programs. Methods: We used the annual OSCAR survey to generate descriptive statistics to compare the three groups of NHs over the period 1997 to 2007. We also examined the prevalence of these programs across states and conducted interviews and internet searches to identify policy and other contextual factors in order to explain observed interstate differences. Results: Prevalence of NH-based CNA training and certification programs dropped throughout the study period, while CNA staffing increased among all three groups over the study period. This suggests that most CNAs may now be receiving their pre-employment training in other venues, such as community colleges and proprietary training facilities. Further, policy and contextual data gathered about states suggest that, in many cases, NHs are not voluntarily dropping their programs, but are losing the ability to provide them due to poor annual surveys. This appears to vary by state due to differences in surveying and imposition of civil monetary penalties.

THE EFFECT OF A WORK-BASED LEARNING PROGRAM ON ASSISTED LIVING DIRECT CARE WORKERS AND RESIDENTS

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Training and career development opportunities for direct care workers (DCW) in assisted living (AL) facilities are limited. Educational and provider partners in Oregon developed an occupational profile of this workforce, identifying basic competencies required for the job. A work-based curriculum consisting of 27 different modules was developed addressing these competencies. Through the Jobs to Careers project (funded by Robert Wood Johnson and Hitachi Foundations), the curriculum is being implemented in five AL facilities. Several individuals from each AL, including experienced DCWs, attended train-the-trainer workshops and are now teaching the modules in their facilities. DCWs who complete all modules, which require return competency demonstration, can receive college credit through Portland Community College (PCC). This paper reports on the evaluation of the project using mixed methods. Focus groups with DCWs and managers/administrators suggested overall satisfaction with the training. A survey of all DCWs confirmed that the modules have made a difference in all 17 areas identified in the focus groups, with greatest gains in confidence in ability to provide good care, knowledge of how to provide good care, and confidence in coworkers to provide good care. DCWs in these facilities have positive job satisfaction scores, low intentions to quit, and most plan to continue working in long term care; virtually all value career development. Observations of DCW and resident interactions and interviews with residents about their care reveal areas of consensus as well as opportunities for continued staff development. Implications of the training program for widespread adoption are discussed.

EMPOWERMENT AMONG NURSE AIDES: EFFECTS ON BURNOUT

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Purpose: Recent studies of empowerment among nurse aides (NAs) in nursing homes have found many positive effects for staff and residents. Are there any negative effects? The current study examines the effects of NAs' perceptions of their levels of empowerment, specifically, their levels of autonomy or ability to make decisions about their work, on burnout. **Design and Methods:** Data were drawn from self-administered questionnaires of 335 NAs from eleven nursing homes located in North Texas. Exploratory and confirmatory factor analyses were used in the construction of measures. Regression was used to estimate the effects of NAs' perceptions of their ability to make decisions about their work on burnout, controlling for other factors expected to influence burnout. These factors include personal characteristics (e.g., difficulty paying bills), perceptions of other work-environment characteristics (i.e., staffing levels, availability of supplies, recognition for good work, and peer support), and facility. **Results:** Factor analyses revealed two dimensions of autonomy—direct decision making and participating with management in decision making. Using measures of these two dimensions, the regression results indicated that direct decision making among NAs affects burnout. However, its effect differs by the degree to which NAs feel they also work with management in decision making. When also working with management in decision making, direct decision making among NAs is associated with lower burnout. When not also working with management in decision making, direct decision making among NAs is associated with higher burnout. **Implications:** Effective empowerment of NAs in nursing homes requires management support.

WORKPLACE INJURIES AMONG FRONT LINE WORKERS IN NURSING HOMES

H. Degenholtz, P. Ghuman, J. Rosen, *University of Pittsburgh, Pittsburgh, Pennsylvania*

The nursing home is a dangerous workplace. Care staff are expected to undertake difficult, strenuous, and repetitious physical work with little training or preparation. Although the overall rate of injuries occurring in nursing homes is reported at the industry level, there is less data available about the individual risk factors and consequences associated with injuries. We examined the detailed injury reports for a 30 month period at two nursing homes (one urban, one suburban, both about 135 beds). Injury reports were linked to job satisfaction surveys to determine predictors and consequences of injury. Most injuries (60%) occurred during direct care, 27% in non-direct care, while 13% could not be classified. The most common part of the body to be injured was the back (28%) followed by the hands (14%) and knees (7%). Direct care injuries resulted in an average of 4.4 days of restricted duty and 12.6 days away from work. Over the time period studied, there were a total of 194 injuries resulting in a productivity loss of approximately 40 hours per 1000 care hours delivered. We conclude that reducing workplace injuries can have a dramatic impact on productivity.

SESSION 925 (SYMPOSIUM)

GSA POLICY SERIES: AGING AND THE NIH STIMULUS

Chair: G. O'Neill, *The Gerontological Society of America, Washington, District of Columbia*

After years of relatively flat funding, the National Institutes of Health (NIH) is poised for rapid growth through fiscal year 2010 as a result of the boost in new funds received under the American Recovery and Reinvestment Act. This symposium will explore several key issues related to this historic stimulus, including how recovery-act funds will likely impact the field of biomedical science, the challenges of the recovery-act funding goals and timetable, and the prospects for biomedical research beyond the NIH stimulus period.

SESSION 930 (SYMPOSIUM)

PROTEIN ALTERATIONS IN AGING AND AGING DISEASE

Chair: A. Gafni, *Biophysics, University of Michigan, Ann Arbor, Michigan*

Discussant: A. Cuervo, *Albert Einstein College of Medicine, New York, New York*

The accumulation of conformationally-altered, dysfunctional, proteins in tissues of aging organisms has been recognized for many years. Recent work has revealed that, in addition to a loss of native activity, certain age-altered proteins gain a toxic activity. This phenomenon is at the origin of a large number of severe human diseases including Type-2 diabetes, Alzheimer's, Parkinson's and Huntington's diseases, to name a few. Why the proteins involved in late life diseases become conformationally altered, what is the origin of their acquired toxicity and what are its underlying mechanisms are all important, hitherto unanswered, questions. This symposium will feature four presentations addressing the effects of protein misfolding in aging and in late life disease, delivered by researchers who have recently made important contributions to this field, each working on a different system. Together, these presentations will serve to portray an updated picture of research in the area of protein misfolding diseases and their age related occurrence.

QUALITY CONTROL THROUGH SELECTIVE AUTOPHAGY: IMPLICATIONS IN DISEASE AND AGING

A. Cuervo, *Albert Einstein College of Medicine, Bronx, New York*

Most cells in old organism accumulate altered proteins. Although often at a very slow pace, this progressive accumulation often com-

promises important cellular functions and eventually becomes detrimental. Cells count on two surveillance systems to handle protein alterations: chaperones and proteolytic systems. Malfunctioning of these systems contribute in large extend to the abnormal accumulation of those altered proteins in numerous diseases and in aging. Our studies have focused primarily in one of the cellular systems for protein removal, autophagy, or the degradation of intracellular components in lysosomes. I will describe the recent findings on the molecular mechanisms of autophagy, its physiological functions and its role in diseases related to problems in protein homeostasis. I will use different examples of aggregopathies to illustrate the contribution of alterations in macroautophagy and CMA to age-related disorders and comment on the efforts of my group to restore normal autophagic activity in old rodents.

ALPHA-SYNUCLEIN: UNTANGLING THE ROLE OF A SHAPE-SHIFTING PROTEIN IN PARKINSON'S DISEASE

E. Rhoades, A. Trexler, E. Middleton, E. Sevcsik, *Yale University, New Haven, Connecticut*

Alpha-Synuclein is the primary component of the Lewy body aggregates found in the brain tissue of persons with Parkinson's Disease. Alpha-synuclein is intrinsically unstructured in solution, though it undergoes a conformational change to predominantly alpha-helical structure upon association with lipid membranes. We use a variety of ultrasensitive fluorescence methods to investigate the effect of membrane composition on the structures and dynamics of membrane-bound alpha-synuclein with the goal of understanding role of conformational plasticity in alpha-synuclein function and misfunction.

SESSION 935 (PAPER)

ASSESSMENT OF PHYSICAL AND MENTAL HEALTH

THE MEASURE OF DAILY LIFE: PROBLEMS WITH DISABILITY CRITERIA AND HOME CARE POLICY FOR OLDER ADULTS

A.W. Costley, *York College-CUNY, Jamaica, New York*

U.S. Population aging is invariably projected through dire predictions of growing dependency among frail adults. Rates of disability and need are routinely assessed through standardized and quantitative surveys on "difficulty" and the need for "assistance" with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). Much less is known, however, about the social context of the assessment process and sociocultural factors shaping daily life for older adults when home care and family members are unavailable. Mixed methods (semi-structured surveys, descriptive statistics, participant observation, open-ended interviews, and thematic analysis), were used to explore the lives of 64 diverse, community-dwelling adults in New York City: 42 women, 22 men, ages 69 to 91 (mean = 79, SD = 5.6). Data revealed considerable complexity in how older adults assess their own needs, resist labels of dependency, and make important distinctions between needing help and having difficulty. Many maintained basic ADLs, but acknowledged increasing inter-dependence with IADLs and tasks not covered by home care policies (e.g. shopping for groceries, walking outside, and managing finances). Proximity to family was also not a strong predictor for daily support where family members were deemed inappropriate caregivers for many basic care tasks. Mixed methods and the resulting data can challenge existing means for assessing dependency and daily needs as well as existing criteria for coverage. Problems with measures of disability and dependency should also challenge existing local and national policies on home care.

INDIVIDUALIZED ASSESSMENT OF QUALITY OF LIFE IN OLD AGE - EMPOWERMENT IN MEASUREMENT

M. Holzhausen, P. Martus, *Charité - Universitaetsmedizin Berlin, Berlin, Germany*

Most assessments of quality of life in old age systematically disadvantage chronically or multiply diseased persons because of their focus on functioning. The domains by which to rate quality of life are fix in virtually all questionnaires. There is need to develop new, age-adequate measures that take into account individuals' priorities and subjective views on quality of life in the highly heterogeneous population of over 65 years. A new questionnaire (FLQM) was validated in a sample of 300 elderly women and men from a representative sample of community dwelling citizens. It provides information about level, but also individual sources of quality of life by asking respondents to generate themselves the domains that most markedly affect their quality of life. Participants were administered the FLQM as well as measures of affectivity, satisfaction with life, health-related quality of life, and subjective and functional health. Convergent and discriminant validity were assessed using Pearson's correlation coefficients. Differential validity was tested for different levels of physical disability and illness. Also, content analysis of the domains mentioned was conducted. Correlation coefficients with convergent and divergent measures point to a good validity. Variability of scores was high; there were floor- or ceiling-effects. Content analysis revealed differential patterns of life domains depending on patterns of morbidity and functionality. The FLQM is a promising new tool for the assessment of level and content of quality of life in old age. It can be utilized for mere monitoring or for in-depth research on individual determinants of subjective quality of life.

SELF-REPORTED HEALTH AND MORBIDITY ONSET IN THE MID-LIFE POPULATION

K. Latham, C.W. Peek, *Sociology and Criminology & Law, University of Florida, Gainesville, Florida*

Self-reported health (SRH) is recognized as a strong and consistent predictor of mortality and functional health decline. Many researchers assume that the predictive ability of SRH extends to morbidity; however, there are few studies examining SRH as a predictor of morbidity onset. Those studies that have examined whether SRH predicts subsequent morbidity have produced equivocal results. This study examines the predictive ability of SRH on morbidity onset among the mid-life population. Utilizing all eight waves (1992-2006) of the Health and Retirement Study (HRS), Cox proportional hazards models were used to estimate the effect of SRH on initial incidence of a general measure of chronic illness as well as initial onset of: coronary heart disease (CHD), diabetes, stroke, lung disease, arthritis, and cancer. A growth curve model was also estimated to examine the impact of SRH (measured at baseline) on the pace of accumulation of chronic comorbidity for those reporting no chronic illnesses at baseline. Age was included in all models as a time-varying covariate. The results revealed that SRH was a significant predictor of initial onset of chronic illness generally and of all conditions except cancer. The effect was particularly pronounced for lung disease and arthritis. Further, those respondents who began the study with higher levels of SRH had exhibited a slower accumulation of comorbidity than those with lower SRH at baseline. This research aids in establishing SRH as a predictor of morbidity onset. The significance of this study is the inclusion of cause-specific morbidity onset and greater time resolution.

PAIN ASSESSMENT TOOLS FOR COGNITIVELY IMPAIRED INDIVIDUALS: FURTHER PSYCHOMETRIC EVALUATION

E. Cisek¹, S. Rosendahl-Masella¹, M.H. Phillips², P. Sansone¹, S.J. Caccappolo¹, *1. Bon Secours Center for Research in Geriatric Care, Riverdale, New York, 2. Ravazzin Center on Aging, West Harrison, New York*

Research indicates that much of the pain experienced by cognitively impaired older adults is under-recognized and under-treated, despite the availability of several tools available to assess such pain. Several recent reviews conclude that these tools must undergo further psychometric testing. As part of an ongoing project funded by the New York State Department of Health, we examined the reliability and validity of three tools designed to assess pain in persons with cognitive impairment: PAINAD, CNPI, and DOLOPLUS-2. Nurses and certified nursing assistants (CNAs) from a non-profit urban nursing home completed the selected tools on two occasions at 24 or 48 hour intervals on a total of 55 residents with advanced dementia. A separate group of nurses and CNAs from the facility's short term unit completed the same tools for 46 cognitively intact patients. For the cognitively impaired sample, we calculated intra-rater reliability, comparing observation 1 and observation 2 for both nurses and CNAs; inter-rater reliability, comparing nurse observations to CNA observations; and internal consistency for each measure. For the cognitively intact group, we compared nurse and CNA assessments to patient self-report, as indicated on the Iowa Pain Thermometer (IPT), as a measure of validity for each tool. Findings show differences in reliability estimates both between instruments and between nurses and CNA's. Correlations between the IPT and the observation measures were all statistically significant. The presentation will discuss the relative benefits of each test to identify pain among the cognitively impaired within a nursing home environment.

AN IRT-BASED ASSESSMENT OF PACSLAC

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Introduction: Previous research showed that the PACSLAC observational checklist is very useful to measure pain in nursing home residents with dementia. PACSLAC was translated into Dutch and the number of items was reduced by applying classical test theory to pain ratings of a researcher (PACSLAC-D). The primary aim of this study was to use ratings of nursing personnel to test the psychometric properties of the items in PACSLAC and to detect biased items by testing for differential item functioning (DIF). Methods and materials: Nursing personnel observed 128 nursing home residents during rest, the influenza vaccination and a patient-specific moment of potential pain. Item response theory was used to achieve the primary aim of this study. Confirmatory factor analysis was applied to determine the factor structure of the valid and reliable items. Results: Of the items that nursing personnel frequently registered as present, 2 items showed DIF. Eighteen items were valid and reliable, of which 14 items were also selected for PACSLAC-D. This finding confirms that these items are valid and reliable indicators of pain in older people with dementia. Confirmatory factor analysis showed that the data could not be ascribed to pain as a general factor, but rather to 3 components of pain: 'Negative reactions to pain', 'facial/vocal/ emotional expressions of pain' and 'resistance to pain'. Conclusion: A refined version of PACSLAC was created that nursing personnel with different educational backgrounds might use to assess pain in older people with varying degrees of dementia.

SESSION 940 (PAPER)

CAREGIVER STRAIN: PHYSICAL AND MENTAL HEALTH PERSPECTIVES

A SNAPSHOT OF THE HEALTH OF CAREGIVERS IN HAWAII, KANSAS, AND WASHINGTON, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEMS 2007

L. McGuire¹, E. Bouldin², E. Andresen², L. Anderson¹, *1. CDC, Atlanta, Georgia, 2. University of Florida, Gainesville, Florida*

Caregiving status and its association with modifiable healthy lifestyle behaviors, use of preventive services, having a healthy weight, and presence of chronic health conditions were examined among adults ≥ 65 years-old. Participants (N=6,138) were obtained from the 2007 Behavioral Risk Factor Surveillance System (BRFSS), a list-assisted random-digit-dialed telephone survey of the noninstitutionalized U.S. adults. Participants in the states of Hawaii, Kansas, and Washington completed questions about caregiving on their state BRFSS survey. Information about self-reported modifiable healthy lifestyle behaviors (not smoking, consuming ≤ 1 alcoholic beverage per day, consuming at least five fruits or vegetables daily, participating in moderate-to-vigorous physical activity during the average week), use of preventive services (receiving an annual influenza immunization and ever receiving a pneumococcal immunization), having a healthy weight (body mass index 18.5–24.9 kg/m²), and chronic health conditions (asthma, arthritis, diabetes, and heart diseases) was obtained. Caregivers were significantly more likely to meet physical activity recommendations than non-caregivers (54.1% versus 42.0%, $p < 0.001$). The two groups did not differ significantly on the modifiable health behaviors of fruit and vegetable consumption, smoking status, or alcohol consumption, or a healthy weight, or in the presence of chronic health conditions. No differences were found between caregivers and non-caregivers on receipt of influenza and pneumococcal vaccination. Older adults who are caregivers have a similar pattern of engaging in health behaviors, body weight, chronic health conditions, and use of preventive services compared to those who are not caregivers despite reporting worse health status.

CONSTRUCTING A PROGNOSTIC TOOL TO IDENTIFY CAREGIVERS AT RISK FOR PSYCHOSOCIAL DISTRESS AFTER NURSING HOME ADMISSION

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The objective of this study was to develop and validate a prognostic index to identify dementia caregivers at greatest risk of having clinically persistent burden and depression following institutionalization study. Data were utilized from the Medicare Alzheimer's Disease Demonstration Evaluation (MADDE). The multi-regional sample of MADDE included 1,116 care recipient and caregiver dyads with data from before and up to 12 months after institutionalization. Statistically and clinically significant reductions in burden occurred for most caregivers following NHA in MADDE, but subsets of dementia caregivers experienced persistent psychosocial distress during the placement transition. The screening tool that emerges from these empirical results could be administered to caregivers at the time their family member enters nursing home care, and would allow a health care team to direct support to individuals at greatest risk during this critical time of transition.

WHO ARE THE STRAINED CAREGIVERS?

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Background: Research findings suggest that caregivers of persons with Alzheimer's disease who experience strain have greater negative

effects on physical and mental health. Few known caregiver interventions have targeted strained caregivers and addressed their health promotion needs. Purpose: The goal of this presentation is to discuss preliminary findings from a lifestyle physical activity intervention for strained family caregivers. Challenges and strategies for recruiting, screening and retaining strained caregivers in intervention studies will be addressed. Design and Methods: This randomized clinical trial tests a multi-component lifestyle physical activity intervention in comparison to a usual-care skill-building intervention. Strain is assessed as level of strain with providing IADL/ADL care. Results: 83 caregivers have been enrolled to date. Strain is prevalent in our study; 16% (n=13) experience low strain, 63% (n=52) experience moderate strain, while 22% (n=18) experience high strain. These caregivers report multiple chronic conditions (61%, n=44), health risk factors (29-41%, n=24-32), and personally challenging situations beyond the caregiving role (30%, n=25). Additionally, 40% to 60% (n=33-50) of caregivers report such symptoms as feeling depressed, restless, or lonely. Chronic physical health conditions include arthritis (63%, n=52), heart disease (16%, n=13), and diabetes (13%, n=11). Health risk factors include 41% (n=32) with hypertension, 29% (n=24) who had a systolic blood pressure >140 at baseline; and 32% (n=27) who have gained/lost weight in the past year. Conclusions: Strained caregivers have a variety of co-morbid conditions that require creative efforts for recruitment, intervention, and retention in clinical trials.

SUGAR MAMAS: THE INFLUENCE OF CAREGIVING RESPONSIBILITIES ON THE DIABETIC HEALTH OF AFRICAN-AMERICAN PRIMARY CAREGIVING GRANDMOTHERS

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Background: 1 in 4 African-American women over 55 are diabetic. Approximately 480,000 women over 50 are primary caregivers of their grandchildren. It is estimated that at least 25% of African-American primary caregiving grandmothers are diabetic. Objectives: To compare the diabetic health of diabetic African-American primary caregiving grandmothers to diabetic African-American women who are not primary caregivers. Methods: 34 African-American primary caregiving grandmothers and 34 diabetic non caregiving women 55-75 years of age were recruited in Arkansas. Measures of diabetic health included BMI, blood pressure, HgbA1c, total cholesterol, urine protein and urine creatinine. Results: The data was analyzed using an Independent t-test with Bonferroni correction and Mann-Whitney test. Statistically significant differences in Systolic pressure ($t = -3.42, p=0.001$) and diastolic pressure ($t = -3.790, p=0.000$) and urine protein ($W=294.00, p=0.000$) were significantly higher in the caregiving group. No statistically significant differences were noted in BMI, HgbA1c, total cholesterol and urine creatinine. Discussion: Differences in systolic and diastolic pressures along with the difference in the urine protein suggest that diabetic African-American primary caregiving grandmothers may have some difficulty maintaining their diabetic health compared to diabetic non caregiving African-American women. Additional research is needed to develop tailored intervention to assist this population in regaining and maintaining their diabetic health since African-American primary caregiving grandmothers' health needs are often unrecognized or overlooked.

SESSION 945 (PAPER)

CHARACTERISTICS OF OLDER DRIVES

PHYSICIAN INTERACTIONS WITH AGING PATIENTS CONCERNING DRIVING FITNESS AND PHYSICIAN UNDERSTANDING OF REPORTING OBLIGATIONS AND REQUIREMENTS

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The proportion of older drivers is rising. Timely and accurate assessment of driving fitness is becoming increasingly important. Primary Care physicians have the most office visits with older patients. Thus, they have frequent opportunities for driving fitness assessment. While the AMA has published guidelines for driving fitness assessment, these may not be broadly known. Additionally, each State governs physician reporting of driving fitness and processes of anonymity differently. To gain understanding about driving fitness assessment and reporting knowledge and practice, survey data were collected from the Primary Care Physicians at a large hospital. While the majority of respondents felt that physicians have a responsibility to report concerns about older adult driving fitness, they did not feel that physicians are the most qualified professionals to make these decisions. The majority of respondents indicated that they would benefit from more education and are unaware of statutory reporting requirements for physicians.

CONSISTENCY OF OLDER ADULTS' DRIVING BEHAVIOR OVER TWO WEEKS

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Few studies have used in-vehicle technologies to capture the naturalistic driving behavior of older adults, all of which have been limited to a maximum one-week monitoring period. The aim of the current study was to examine the consistency of driving over an extended (two-week) period. Thirty-two drivers, 53% female aged 65 to 91 years had two recording devices installed in their vehicle to monitor driving for 14 consecutive days. Each person completed the Driving Comfort Scales: DCS-D (Daytime) and DCS-N (Nighttime). Exposure data was consistent from week to week for distance (total, for each day of the week and at night), duration and number of stops. On average, participants made one more trip ($p = .01$) and drove an extra day ($p = .02$) during the first week compared to the second. Over the two weeks, each participant logged at least one event of night driving; however 11 people did not drive at night in either week 1 or week 2. Also, there were some inconsistencies regarding the strength of associations between perceptions and exposure. For instance, relationships with duration were significant with DCS-D and DCS-N scores in week 1, but did not reach significance in week 2. Distance (km), meanwhile, was significantly related to DCS-N for both weeks, but only reached significance for DCS-D in week 1. Data for one week may not be enough to capture less frequent events (e.g., night driving) and reveal significant relationships that may exist, especially if samples are small.

PSYCHOLOGICAL RESOURCES VARIABLES ARE ASSOCIATED WITH DRIVING CESSATION

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The decision to stop driving is a difficult, complex one, influenced by a number of variables difficult to capture. In this study we sought to better understand the variables associated with driving cessation in a convenience sample of 223 participants ranging in age from 55 to 91

years. The following variables were expected, based on the literature, to be associated with driving cessation: age, gender, functional ability, and health variables. To enhance our model we added personality traits and psychological resource variables. Using a hierarchical approach, we entered the demographic, function, and health variables first, followed by the psychological variables to determine the additional component of the variance they explain. At the time of the survey, 30 (13.5%) participants had stopped driving in the past three years. The demographic, function, and health variables explained 29% of the variance in driving status (Nagelkerke's R^2 ; $p < .001$) with age being the most important one (older drivers had higher odds of not driving). The addition of the psychological variables explained an additional 10% of the variance in driving status (final model: Nagelkerke's $R^2 = .39$; $p < .001$). Specifically, lower scores on a measure of life purpose and possessing a more external locus of control were associated with driving cessation. The inclusion of psychological variables enhances our understanding of driving cessation and should be included in future studies. Further work using a longitudinal approach is required to better understand if the psychological variables data are predictors or outcomes of driving cessation.

OLDER AUSTRALIAN DRIVERS: PREDICTORS, COGNITIVE AND VISUAL IMPAIRMENT, AND INTERNATIONAL COMPARISONS

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OBJECTIVES: This study aimed to investigate: (1) associations between demographic, health and functional factors and reported driving status, (2) the proportion of current drivers with probable cognitive and visual impairments and (3) the rates of driving/licensure across three countries. **PARTICIPANTS:** Adults aged 65 to 103 ($n=5,206$) from the DYNOPTA project. **MEASUREMENTS:** Measurements included: driving status, demographic characteristics, Mini Mental State Examination (MMSE), visual acuity and occupation. **RESULTS:** Men and participants with higher-level occupations had increased odds of reported driving. Older age, more medical conditions, and poorer vision increased the odds of not driving. Compared to married adults, persons who were divorced, widowed or never married were at a greater risk of not driving. Descriptive analyses revealed a large proportion of men with probable visual or cognitive impairments who reported driving. Subsequent comparative analyses with the DYNOPTA sample to other published US and Canadian data revealed lower proportions of current drivers among DYNOPTA women and those at older ages; however there were consistently lower proportions of drivers within Australia and Canada relative to the US. **CONCLUSION:** The rate of men with probable dementia or visual impairment who report driving is of particular concern. Research and policy needs to focus on evidence-based assessment of older drivers and development of appropriate interventions/programs to maintain the mobility and independence of older adults.

GENDER DIFFERENCES IN DRIVING EVALUATIONS

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Concerns have surfaced about the gender differences in driving for older adults. The research question in this study, evaluated gender differences in a subject pool of 55 adults, with and without disabilities, who were given comprehensive driving evaluations, including a behind-the-wheel (BTW). The data was collected at centers in two states. In addition to the typical driving evaluations, a standardized instrumental activities of daily living (IADL) assessment was performed with the

subjects and compared between those who passed, failed, and were restricted on the BTW as well as for gender effects. There was no sampling bias between the two centers. Results indicated that the IADL assessment was able to differentiate between individuals who passed the BTW and those who failed, and between those with restrictions and those who failed ($F=6.54$, $p<.01$) This presentation will discuss the fact that there was a significant difference between men and women who passed the BTW ($X^2=5.18$, $p<.04$) with women failing the BTW less frequently than men. This gender effect also corresponds with the results of the IADL assessment. Using the Assessment of Motor and Process Skills (AMPS), which generates a skill score for motor skills and process (cognitive) skills, the women had higher mean scores than men for both motor and process. There was a significant difference between men and women for motor ($t=-2.03$, $p<.048$) and it approached significance for process ($t=-1.96$, $p<.058$). The clinical significance of this study will be discussed along with implications for practice.

SESSION 950 (PAPER)

COGNITIVE ISSUES IN DEMENTIA

DOES EMOTIONAL CONTENT ENHANCE OLDER ADULTS' AND ALZHEIMER'S DISEASE PATIENTS' MEMORY BINDING?

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Previous studies have shown that associative memory for within-item features is enhanced for emotionally arousing items, whereas arousal-enhanced binding is not seen for associations between distinct items (for a review see Mather, 2007). For example, if you witness a car accident, you may accurately remember the type of car or its color (intrinsic features), whereas you may not correctly remember the pedestrian who called 911 (background information associated with the accident). The former type of associative memory is referred to as within-item memory binding, and the latter is called between-item memory binding. These positive and negative effects of arousal in memory binding have largely been tested on younger adults but not on older adults and patients with Alzheimer's disease (AD). The present study compared younger, older, and AD groups in the effects of arousal on item memory and within-item and between-item memory binding using arousing and non-arousing pictures as target items and abstract shapes as background objects. The results revealed that arousal improved all groups' item memory and older adults' within-item memory binding. Arousal had no effect on younger and AD groups' within-item memory binding and all groups' between-item memory binding. Non arousal-enhanced within-item memory binding in younger adults was due to a ceiling effect. Overall, our results suggest that the effects of arousal on item memory remain similar in normal aging and, to a smaller extent, in early stage AD, whereas the effects of arousal on within-item memory binding remains intact in normal aging but not in AD.

THE VALUE OF CNAS IN RECOGNIZING PAIN IN COGNITIVELY IMPAIRED NURSING HOME RESIDENTS

S. Rosendahl-Masella¹, E. Cisek¹, M.H. Phillips², P. Sansone¹, S.J. Caccappolo¹, 1. Bon Secours Center for Research in Geriatric Care, Riverdale, New York, 2. Ravazzin Center on Aging, West Harrison, New York

Research indicates that at least one in four nursing home residents suffer from moderate pain daily. A large proportion of these residents have pain that is undetected and/or under-treated. Cognitively impaired residents receive less pain management, despite having the same conditions that are known to cause pain in cognitively intact residents, primarily due to their inability to verbalize their pain. As part of a study funded by the New York State Department of Health addressing pain among the cognitively impaired, four focus groups were conducted with

nursing home nurses (2) and certified nursing assistants (CNAs, 2) to explore whether they had similar ways of identifying pain, the process by which that pain is addressed, and their feelings about using a structured pain instrument in their work. Findings indicate that both groups identify behavioral signs of pain that are consistent with American Geriatrics Society Guidelines, and highlight the importance of a change from the resident's usual behavior. Both groups take action to address pain but also reported that difficulties sometimes exist when they need to report pain to their superiors. They would welcome a brief assessment and tracking tool, used by CNAs on the "front line," to cue staff to signs of pain, to provide back up to verbal reports, and to track pain over time. Future research will evaluate the effectiveness of implementing such a tool.

AGGRESSIVE BEHAVIORS BETWEEN RESIDENTS WITH MEMORY LOSS: AN IN-DEPTH EXAMINATION

E. Caspi, *Gerontology, UMass Boston, Boston, Massachusetts*

Aggressive behaviors between residents (ABBR) with Alzheimer's disease or a related dementia who live in long-term care residences is a concerning but understudied phenomenon. Verbal and physical ABBR may cause psychological and physical harm to the residents involved in such incidents. This paper presents results from a recent 10-month qualitative study that was conducted in two Special Care Units of an Assisted Living Residence dedicated to elders with memory loss. Direct observation was used as the primary data collection strategy (complemented by semi-structured interviews with care staff members). Both the prevalence of occurrence of ABBR and the circumstances in which they took place were examined. The paper reports on the prevalence of ABBR and provides an in-depth look into the circumstances in which these occur. Most of the incidents that were documented were situational and developed gradually, which indicates a significant opportunity for prevention of these behaviors. Identification of patterns of these situational circumstances can serve as the basis for development of informed and effective intervention strategies in long-term care residences. The findings suggest strategies for prevention and alleviation of ABBR. Missed opportunities for prevention will also be reported. After attending the talk participants will have an in-depth understanding of the nature of ABBR and will be able to identify the ways in which they develop and can be prevented. Implementation of effective measures to prevent ABBR may assist in improving the quality of life of the residents who are directly or indirectly involved in these distressing behaviors.

LAY APPRAISAL OF COGNITIVE IMPAIRMENT SYMPTOMS IN MID-LIFE AND OLDER ADULTS

D.D. VonDras, *University of Wisconsin-Green Bay, Green Bay, Wisconsin*

This research explores mid-life and older adults' appraisal of cognitive impairment symptoms and need to seek medical care. Previous research has indicated base-rate information to influence illness perceptions and behavior (e.g., Jemmott et al., 1988). For example in the area of cognitive impairment, older adults who worry about memory problems were found to be more likely to perceive greater risk for developing Alzheimer's disease (AD) and more serious consequences of the illness (Werner, 2002). A survey methodology was used to examine how age and family occurrences of dementia and stroke may moderate appraisals of cognitive impairment and decision to seek medical care. The sample was comprised of 210 adults ranging in age from 40 to 91. Respondents read vignettes embedded with symptoms of cognitive impairment and stroke, and made illness appraisals, ratings of need to seek medical care, and indicated family occurrence of illness. Results indicated an Age by Family Occurrence of Dementia interactions on ratings of the significance of cognitive impairment symptoms, $F(1, 196) = 4.26, p < .05$, and the need to seek medical care, $F(1, 196) = 5.91, p < .05$; these interactions suggest advancing age and family occurrence

of dementia to lower ratings of significance of symptoms and the need to seek medical care. Similar effects were not found in appraisal of stroke symptoms. In general, these data suggest advancing age and exposure to family members with dementia may alter appraisal of cognitive impairment symptoms and resultantly the decision to seek early diagnosis and professional help.

INCREASE IN TOTAL SLEEP TIME ASSOCIATED WITH DOSAGE OF STRENGTH TRAINING IN COGNITIVELY IMPAIRED ELDERS

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The study examined whether improvement in total sleep time (TST) was associated with dosage of strength training, social activity, and walking. As a part of a randomized controlled trial, 31 cognitively impaired elders (mean age 81.9 y; 18 men) received 7 weeks of strength training (ST), individualized social activity (SA), and walking. The elders received high intensity ST to the hip and arm extensors 3 days a week, and 2 days a week they walked with a research assistant for up to 60 minutes. The elders also received individualized social activities 1 hour daily 5 days a week. Mean TST (measured at baseline and 7 weeks using 2 nights of polysomnography) increased from 4.9 h (SD = 1.6) to 5.9 h (SD = .89). Number of days of ST (mean = 20.03 days; SD = 8.44), SA (mean = 37.5 days; SD = 7.71), and walking (mean = 9.5 days; SD = 6.7), were correlated with increase in TST. Only number of days of ST showed significant correlation with TST ($r = .41; p = .02$). We conclude that the number of days of ST is an important influence on response to a combined ST, SA, and walking intervention. Support: R01-NR-007771

SESSION 955 (PAPER)

DEMENTIA: PRESCRIPTIONS AND PERSPECTIVES

THE IMPACT OF HOSPICE AND DEMENTIA SPECIAL CARE UNITS ON END-OF-LIFE CARE FOR INDIVIDUALS WITH DEMENTIA

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In the nursing home setting approximately 50-75% of residents have a diagnosis of dementia. Many of these individuals die in nursing homes. End-of-Life (EOL) care for individuals with dementia is provided in three settings, hospice care, Dementia Special Care (as expressed in Dementia Special Care Units) and traditional care. Hospice provides EOL care for individuals with dementia regardless of nursing home setting. Both hospice and Dementia Special Care Units (DSCU) are models of care with improved outcomes. They share a holistic approach and limited enrollment for persons with dementia. Traditional EOL for individuals with dementia in nursing homes is difficult. In one study, most residents admitted with advanced dementia died within six months of admission with only 11% being referred to hospice. Non-palliative care has little success in alleviating symptoms, with an increase in decline, and hastened death. Research on hospice care shows care benefits such as decreased hospitalization, pain and dyspnea when compared to traditional care. DSCU research has found improved outcomes such as increased personalization, and decreased social withdrawal and cognitive decline when compared to traditional dementia care. Using Structure-Process-Outcome theory, this pilot study analyzed the structure and process factors of hospice and DSCU versus traditional care to determine their association with the outcome factor of better EOL care scores. Preliminary results include a positive correlation between Comfort at Death scores and enrollment in Dementia Special Care. The process factor of family participation in inter-disciplinary team care plans is negatively correlated with the number of days in hospice.

OPERATIONAL ZING PERSON-CENTERED CARE FOR PERSONS WITH DEMENTIA DURING HANDS-ON CARE: AN INDUCTIVE EXPLORATION

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SIGNIFICANCE: Person-centered care (PCC) is a philosophy of care emphasizing the individual needs, priorities, and preferences of patients over those of health care team members or institutions. This approach to care is being widely promoted in the United States as a means to ameliorate known quality of care concerns in nursing homes. However, there is a lack of understanding about how PCC is operationalized during hands-on nursing home care, and is even less understood in the care of persons with dementia. The purpose of this study was to develop conceptual definitions of person-centered interactions that occur during assistance with morning care between professional caregivers and persons with dementia residing in nursing homes. **METHODS:** Observational methods using qualitative description and content analysis were used to examine existing video-recorded episodes of morning care. Content of selected episodes was described, coded, and then classified in an inductive exploration. Content experts and practicing professional caregivers reviewed, discussed and contributed to the conclusions. **DATA SOURCE:** 144 video-taped episodes of morning care being provided to persons with dementia in 3 urban nursing homes in Portland, Oregon. Of these, 7 cases were purposefully selected for analysis. **FINDINGS:** Critical attributes that emerged during analysis include a) monitoring for cues, b) asking for feedback, c) deferring to the resident, and d) adjusting care. Conceptual definitions were developed that correspond to the critical attributes. Findings suggest that modifications to current theory are due consideration in order to more accurately portray the concrete activities comprising person-centered care during hands-on care delivery.

THE ALZHEIMER'S DISEASE MOVEMENT AND THE DEBATE BETWEEN CURE VS CARE: THE REPERCUSSIONS OF RELIANCE ON THE BIOMEDICAL MODEL AS A SOCIAL MOVEMENT RESOURCE

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The historical development of the Alzheimer's disease (AD) movement can be, in part, traced back to caregivers' attempts to draw attention to the lack of appropriate services available to help them address the needs of people with AD, and the transformation of the medical concept of AD. The organization of caregiver and medical researcher interests evolved into the Alzheimer's Association. Authors highlight the importance of: 1) political constraints on entitlement spending; and 2) the medical re-conceptualization of AD (as primarily affecting elders), that institutionally shifted the movement toward advocacy for biomedical research funding (i.e., cure) and "away" from expanding LTC funding to assist the feminized informal care system. Adoption of the medical frame, resources accepted, early leadership, and political opportunity structures allowed for the permeation of AD movement organizations' boundaries leading to advocacy for a cure as their primary goal rather than advocacy for LTC services and support. Policy and movement priorities emerged in the context of social and political opportunity structures that historically had been instrumental in building the NIH research enterprise. The political and economic feasibility of the curative approach, legitimacy of the medical frame, commodification of aging, fear of aging and cognitive decline, and relative inability of those with AD to advocate for themselves, contributed these outcomes. A question that arises is whether the "curative" emphasis will successfully address the social and health problem of AD; or whether sustaining the essential informal LTC networks for the growing population of people with AD will necessitate other policy approaches.

SOCIAL ACTIVITY AND EXERCISE INCREASE TOTAL SLEEP TIME: A RANDOMIZED CONTROLLED TRIAL

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Nocturnal sleep in older adults with cognitive impairment (CI) is light and fragmented with frequent awakenings. The aim of this randomized controlled trial was to determine the effect of individualized social activities and exercise on total sleep time. 193 residents (mean age, 81.87 years; 116 women; mean Mini-Mental Status Examination score, 20.35) of nursing homes and assisted living centers were assigned to 7 weeks of: 1) individualized social activity, SA (n = 50); 2) physical resistance training and walking, PT-W (n = 55); 3) combined SA/PT-W (n = 41); or 4) usual care (n = 47). The SA group received social activities 1 hour daily 5 days a week. The PT-W group received high intensity strength training to the hip and arm extensors 3 days a week, and 2 days a week they walked with a research assistant for up to 60 minutes. The combined SA/PT-W group received both SA and PT-W. The control group participated in the usual activities provided in the homes. Total sleep time was measured at baseline and 7 weeks using 2 nights of polysomnography. A one-way analysis of covariance, with the covariate the mean of the 2 nights of baseline total sleep time, showed that total sleep time in the SA/PT-W group significantly increased in comparison to the control group (adjusted means 364.2 minutes versus 328.9 minutes, $p = .001$). We conclude that individualized social activity combined with strength training and walking resulted in improved nighttime sleep in cognitively impaired older adults. Support: R01-NR-007771

IN SICKNESS AND IN HEALTH: SPOUSE'S EXPERIENCES OF EARLY STAGE MEMORY LOSS

R.L. Beard, *Department of Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

To better understand the social impact of Alzheimer's disease, this research examined the similarities and differences of spouses' experiences when one person is living with memory loss. In-depth qualitative interviews were conducted with nine dyads (N=18) and resulted in 311 pages of transcript narrative data. Grounded theory methods were used to collect, code, and analyze data into overarching themes. Common themes included a belief that they were "in this together" and a shared desire to focus on "what is left." Significant differences according to gender and mental status were also reported, however, with women caregivers being more likely to downplay their stressors and focus on maintaining the autonomy of their male spouses and those diagnosed seeing their condition more as a normal accompaniment to aging and dismissing the negative implications of framing the experience as a loss of self. There were also important gender distinctions in the coping strategies used by caregivers, with men employing less tangible mechanisms, such as faith and optimism, and women utilizing concrete aides like keeping lists. Understanding the importance of gender roles and social norms regarding living with Alzheimer's disease can be used to inform medical encounters and help diagnosed individuals and their families receive quality care that is person-centered. Ultimately, these findings challenge views about Alzheimer's that claim the experience is all bad by demonstrating the strength of spousal bonds in helping both entities manage their daily lives.

SESSION 960 (SYMPOSIUM)

HEALTHY AGING THROUGH ACTIVE LIVING

Chair: *K.E. Whitfield, Psychology and Neuroscience, Duke University, Durham, North Carolina*

As our knowledge about aging increases, the traditional ways of thinking about quality and quantity are being challenged. There is interesting work arising from biological studies like those of telomere length and interventions like caloric restriction that address quantity of years lived. There is more interest than ever in not just adding years to life but adding life to years. It is clear that behavioral and social factors significantly contribute to this equation. In this presidential symposium for the Behavioral and Social Sciences section, we will examine mental, physical, and social aspects of engaging in programs that promote an active lifestyle. Specifically we will discuss how physical activity, volunteerism and training the mind contribute to healthy aging. Presentations will address: the impact of lifestyle on quality of life, challenges to implementing programs, models for delivery and implementation of active lifestyle programs, and results of these programs.

PHYSICAL ACTIVITY AND HEALTHY AGING

D. Buchner, *Kinesiology & Community Health, University of Illinois, Champaign, Illinois*

Regular physical activity provides extensive health benefits throughout the lifespan. In particular, physical activity is a key determinant of health-related quality of life in older adults. However, older adults are the least active age group. Objective assessments of physical activity in NHANES indicate that less than 5% of older adults meet public health recommendations. This presentation will summarize the evidence for health benefits of physical activity especially relevant to older adults, including reduced risk of falls, cognitive impairment, depression, and functional limitations. Next, the presentation will discuss public health recommendations for older adults from the 2008 Physical Activity Guidelines for Americans (e.g., how to monitor the intensity of physical activity in older adults so as to reduce injury risk). Finally, the presentation will discuss evidence-based approaches to increasing physical activity in older adults, with a focus on the translational research of the Active for Life initiative.

STAYING MENTALLY FIT: COGNITIVE TRAINING

S.L. Willis, *Department of Psychiatry & Behavioral Sciences, University of Washington, Seattle WA, Washington*

Recent research indicates that cognitive engagement in midlife and old age is associated with maintenance of everyday functioning and possibly in delaying the onset of cognitive risk in old age. A major literature supporting this position comes from the cognitive training literature. An overview of the evolution of research on cognitive training, outlining major findings and limitations will be presented. A major focus will be on key findings from the Advanced Cognitive Training in Vital Elderly (ACTIVE) project, the largest randomized clinical trial of behavioral cognitive intervention with nondemented elderly, funded by NIH. Findings of ACTIVE are particularly relevant to the symposium theme, since study outcomes focused on maintenance of everyday functioning as well as improvement of cognitive abilities. The ACTIVE conceptual framework linking basic cognition and everyday functioning will be presented. Future directions in cognitive training interventions will be the final topic of the presentation.

VOLUNTEERISM AND HEALTHY AGING

L.P. Fried, *Mailman School of Public Health, Columbia University, New York, New York*

Certain types of volunteer roles offer potential pathways to health promotion, via generativity, structured activities, and/or physical, cognitive and social activity. In addition, volunteer roles that reimburse for

expenses or provide income support are of import in health outcomes for some older adults. Further, volunteer roles designed for societal benefit are of import in changing perceptions of older adults in an aging society, perhaps strengthening the cost-benefit perceptions of programs such as Medicare. This talk presents an overview of the import of such roles, and talks about lessons from one model of senior volunteerism designed to positively benefit all of these risk factors: Experience Corps. In this program, a critical mass of older adults serve in public elementary schools in roles designed for high impact for all children in a grade. The evidence-based design of Experience Corps also sought to improve key factors for healthy aging. Early evidence for impact for the individual and implications for society are discussed.

SENIOR ODYSSEY: THE EFFECTS OF INTELLECTUAL AND SOCIAL ENGAGEMENT ON COGNITIVE VITALITY

E. Stine-Morrow, S. Noh, X. Gao, *Educational Psychology and Beckman Institute, University of Illinois, Champaign, Illinois*

Individuals who engage in complex work and leisure activities are often found to show relatively high levels of cognitive performance. While such data are consistent with the notion that an active lifestyle serves to enhance cognition (the “use it or lose it” hypothesis), an alternative explanation is that more cognitively vital individuals seek out more challenging activities. The Senior Odyssey is a program of intellectual and social engagement revolving around ill-defined problem solving, with elements of team-based collaboration, competition, and play. Participants are randomly assigned to participate in the Odyssey or to a waitlist control, and groups are compared on components of fluid ability in a pretest-posttest design over approximately five months. We report data suggesting experimental support for positive effects of engagement on cognition.

SESSION 965 (PAPER)

LIFE IN NURSING HOMES

DISCONTENTMENT WITH THE CONTINUITY OF FORMER RELATIONSHIPS: ASSISTED LIVING RESIDENTS SPEAK OUT

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Older adults who need assistance with personal care are increasingly choosing assisted living facilities over more institutionalized settings because of the belief that assisted living facilities offer more choice and control, dignity, and a home-like atmosphere than nursing homes (Kane, 2001). The transition from independent living to an assisted living environment often involves a change in relationships, roles, and responsibilities. In an effort to understand the continuity of familial and social support for assisted living residents, this study used grounded theory to identify the main themes that emerged from the qualitative interviews conducted with 29 residents of four different assisted living facilities in Alabama. This study is a subset of the sequential mixed method project. Participants in the qualitative interviews were 65 and older, were not diagnosed with dementia, and were capable of understanding and answering questions. The interviews took place between February and July, 2007. The core theme that emerged from the interviews was discontentment with the continuity of their former relationships with family and friends. The residents expressed a desire of “wanting more” and a sense of “losing control.” They wanted to feel more connected to their family and friends but seemed hesitant to ask for more, fearing being perceived as being dependent or burdensome. They appreciated what they had but yearned for the past. The results of this study can inform social workers and other professionals in their understanding of ways to improve residents’ interactions with family and social support networks.

BEHIND CLOSED DOORS: SEXUALITY IN THE NURSING HOME

G. Doll, *Kansas State University Center on Aging, Manhattan, Kansas*

Nursing homes are currently attempting to provide “person-centered” care. This care is focused on attending to residents’ medical, social, psychological and spiritual needs. Through seven years of researching and writing about culture change in Kansas nursing homes, the Center on Aging at Kansas State University has explored various aspects of resident life including dining, end-of-life needs, activities, community connections, and diversity. In the course of this work staff recognized sexuality in the nursing home as the least understood of resident needs. Little is known about this topic and administrators seldom proactively determine staff direction when sexual activity occurs in the home. In most cases sexuality is only considered when a complaint has been lodged with a state regulatory agency. Sexual expression, both appropriate and inappropriate, has been a subject to be avoided and kept “behind closed doors.” Center on Aging staff surveyed social workers and social service designee from the pool of 325 non-profit and for-profit nursing homes in Kansas to determine the frequency of resident sexual expression and what policies, if any, are used to direct staff behavior following these incidents. These results are shared with the audience. In addition, participants will be given access to training materials for improving staff attitudes and behavior related to sexuality in nursing homes.

RESIDENT CHARACTERISTICS ASSOCIATION WITH TRANSFER FROM THE NURSING HOME TO ACUTE CARE

A. Ashcraft, *SON, Texas Tech University Health Sciences Center, Lubbock, Texas*

Nursing home residents and their families are frequently confronted with the decision to transfer to the hospital for advanced treatment modalities. Besides not being the best place to receive primary care, transfer to the hospital may be contrary to resident preference. Interventions that show promise in reducing hospitalizations include the presence of a mid-level practitioner in the nursing home, home health in the nursing home, and alignment of reimbursement so providers do not have financial incentive to hospitalize. With prevention of transfer being the goal, the specific aim of this study was to identify resident characteristics associated with transfer from a skilled nursing home to the acute care setting. Data was collecting using retrospective chart review of skilled nursing home residents transferred to the hospital the previous year. The most frequent diagnoses on transfer were hypertension, CAD, and CHF. The most frequent signs and symptoms requiring transfer were dyspnea, decreased oxygen saturation, chest pain, and elevated blood pressure. The most common procedures implemented prior to transfer were vital sign assessment, oxygen by nasal cannula or face mask, and x-rays. In the hospital, x-rays, laboratory blood analysis, and IV fluid infusion were performed most frequently. Upon return to the nursing home, common diagnoses that were added to a resident’s diagnosis listing that were not present upon initial transfer included pneumonia, UTI, dehydration, and CHF. These results will guide the next study to evaluate an intervention aimed at preventing transfer and managing resident care at the safest and lowest level of care.

A SYNTHESIZED REVIEW OF ACTIVITY AS THERAPY IN LONG TERM CARE

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Engagement in pleasant and/or meaningful activity is a fundamental component of quality of life. The role of activity engagement as therapy in long term care settings was formalized 22 years ago with the passage of the Nursing Home Reform Act, as part of the Omnibus Budget Reconciliation Act of 1987 (OBRA ’87) which, for the first time, broad-

ened the concept of adequate care to include psychosocial and quality of life issues and required activities personnel be employed in certified long term care facilities. The review was limited to activities whose primary purpose was to promote an active state, an operationalization that didn’t require an activity to be defined as “leisure”, and that could include rehabilitative activities but excluded activities if the primary purpose was rehabilitation. Disciplines which have contributed to the development of activity interventions include recreation therapy, occupational therapy, music therapy, certified activity professionals, psychology, social work, and sociology. Successful activities depend on the match between the individual and the activity, the pleasantness and/or meaningfulness of the activity for the individual, and the presentation of information regarding the activity. We synthesized the literature regarding behavioral activation therapy, animal-assisted therapy, recreation therapy, music therapy and music activities, art therapy, and life review. Overall, the findings should be considered preliminary and interpreted cautiously due to the lack of randomized, controlled trials needed for strong causal inferences. Future directions that include the use of technology (e.g., Wii®, touch screen reminiscence intervention) and policy changes such as furthering pervasive culture changes are discussed.

SESSION 970 (POSTER)

MINORITY AGING

RECRUITING AFRICAN AMERICAN OLDER PARENT-ADULT CHILD DYADS WITH HYPERTENSION (CHAAF)

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Many African Americans experience the onset of hypertension at an early age; thus multiple generations within a family may be struggling to manage their high blood pressure. This presentation reports our ongoing efforts to recruit 90 African American, older adult – adult child pairs diagnosed with high blood pressure for a face-to-face interview to examine the congruence of hypertension self-care practices within generations of a family. Adult children had to be at least 21 years old, with parents of any age, and both parties must have hypertension for at least 6 months. We recruit across the age span, and are able to target either the adult child or the parent as the initial participant of the pair. A multi-pronged strategy is utilized: recruiting through Black churches, clinician referrals, blood pressure screenings at health fairs, presentations at senior centers, write ups in the local media, and partnerships with health-related organizations. Results: To date, we have achieved 29% of our goal with one year remaining. Participants range in age from 26-85; mean age of children is 44.73 and mean age of parents is 67.77; 32% live in the same household. Contacts are initiated evenly between parents and children. Most participants were recruited from specific events (53%), and 12% from local media. Over 7000 flyers were distributed at Black churches, but few parishioners initiated contact. However, church health ministry workers significantly raised our visibility in the larger community. Participant referrals to other eligible family members generate increasing numbers of participants.

DISABILITY AND DEPRESSION AT MIDLIFE: MAKING SENSE OF COMPARISONS ACROSS THREE ETHNO RACIAL GROUPS

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Previous research has demonstrated that depressive symptoms and depressive disorder are more common among middle-aged and older adults with disabilities than those without disabilities in those age groups.

In addition, previous research has shown differences across ethnoracial groups in prevalence of depression in disabled, non-disabled, and caregiving populations. This study used data from a broader study of coping with vision loss at midlife to examine similarities and differences in depressive symptoms across three ethnoracial groups: White (non-Hispanic), Black (non-Hispanic), and Hispanic (of any race). Telephone interviews were conducted with 191 middle-aged (45-64 years) adults with vision impairment who self identified as White (105), Black (63), or Hispanic (23). At the bivariate level, there were no statistically significant mean differences in total CES-D scores across the three groups. However, Blacks had significantly higher mean scores (more positive affect) on the well-being subscale of the CES-D than Hispanics, and there were no differences between Blacks and Whites or Hispanics and Whites. At the multivariate level, we regressed CES-D well-being scores on a number of demographic, health, and social variables. In the final model, better self-rated health, fewer difficulties with activities of daily living, and more social support from family were positively related to well-being scores. In addition, Whites had significantly lower well-being scores than Blacks after accounting for all other variables in the model. These findings demonstrate the complexities in understanding depressive symptoms across diverse ethnoracial groups. Implications for assessment and practice will be discussed.

HEALTH NEEDS OF VIETNAMESE AMERICAN ELDERS

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Purpose: The purpose of this descriptive ethnography was to identify the barriers and facilitators to health care access and utilization for Vietnamese American elders residing in Oklahoma. **Methodology:** The sample (N=57) was a purposive sampling of 27 Vietnamese elders ages 60 years and over, 11 middle aged adults and 19 community leaders and providers. Data collection methodology included ethnographic interview, field notes and participant observation. The face-to-face interview was conducted in the respondent's home or a place of choice by the respondent and lasts for about an hour. A semi-structured interview guide was used. Each interview was conducted in the language preferred by the respondent (English, Chinese or Vietnamese). Informed consent was obtained before the interview. The interview was audio taped and transcribed verbatim. Data was analyzed using NVivo 8 software for categories, themes and domains. Comparison was made of the responses from the elders, their younger adults, and the community leader/provider group. **Findings:** The data revealed Vietnamese elders residing in smaller urban enclaves in the US have particular difficulty accessing Western health care and understanding health information compared to younger Vietnamese or Anglo populations, and more than Vietnamese elders who reside in larger urban enclaves. Reasons for this include their lower English proficiency and access to bi-lingual services, greater transportation barriers, fewer bilingual providers, and fewer social networks especially when adult children have long work days. The data revealed elders' reliance on adult children for access to health care, their low rates of health literacy and lack of health concern about mental health issues. The interviews also elicited data on elders' preferences in receiving health information. **Implications:** This data will be important in future programs to provide innovative health literacy interventions in this community and other diverse vulnerable populations.

AFRICAN AMERICAN TRIATHLETES: AN EXERCISE REGIMEN FOR THE AGING WOMAN

C. Brown¹, S. Collins², 1. *Bethune-Cookman University, Daytona Beach, Florida*, 2. *Summer Collins, MPH, Dallas, Texas*

While the life expectancy rate for African Americans has increased in recent years, it is still on average 5.1 years shorter than other American ethnic sub-populations. The leading causes of death, by certain chronic diseases, can be positively impacted by increased regular phys-

ical activity and exercise. Significant numbers of non-African American women participate jointly in physical fitness activities and challenges. The fact that African American women participants are lacking in these groups contributes to the 70% of US minority women who do not participate in regular physical activity. A minority triathlon group, in Denver, Colorado, is composed of approximately 30 women ranging in age from 20-70 years old. Subjects participate in regular exercise regimens and work within a supportive, nurturing environment to achieve the tangible objective of completing a triathlon. We anticipate participants will increase physical activity levels, be more likely to continue physical activity upon completion of the triathlon, and experience an overall improvement in well-being and self esteem. Data will be collected from participating triathletes during training and 12 weeks following the triathlon, using an administered survey. The Rosenberg Self Esteem scale will be used to assess any change in self esteem at the end of the training. We anticipate this model of group participatory exercise, while currently rare among minority women, can be widely implemented to improve their physical health and social networks, ultimately leading to improved gains in overall health status and life expectancy.

FACTORS PREDICTING ALCOHOL USE AMONG OLDER KOREAN IMMIGRANTS

W. Kim, *University at Buffalo, Buffalo, New York*

Undetected alcohol problems can lead to serious physical and mental health problems, resulting in diminished quality of life for older individuals. The purpose of this study is to investigate factors that influence drinking behavior among older Korean immigrants in Toronto. A total of 149 participants (mean age = 74.07, SD = 8.24), age 60 or older, completed face-to-face interviews conducted in Korean. Logistic regression models were used to assess how demographic characteristics (gender, age, years of immigration, religion), health condition, depression, and social support were associated with drinking behavior after controlling for first age of drinking. The results showed that married older immigrants were 1.6 times more likely to drink than were divorced or widowed participants ($p < .05$). The separate analyses of men and women showed that there were no significant predictors of drinking for men, whereas married women were almost 4 times more likely to drink than were women who were single, and Protestant women were 3.3 times more likely to drink than were non-Protestant women ($p < .05$). Heavy drinking, defined by two or more drinks for women and three or more drinks for men, was significantly associated with the level of depression ($p < .05$). Gender differences were also observed in the model. For older Korean men, higher depression scores were associated with heavy drinking, whereas for women, younger age was associated with heavy drinking. Overall, gender was an important moderating factor of drinking behavior. Findings and implications are discussed in a cultural context.

RACE, EDUCATION, AND HEALTH IN LATE LIFE

L.L. Barnes¹, R.S. Wilson¹, L.E. Hebert¹, P.A. Scherr², D.A. Evans¹, C.F. Mendes de Leon¹, 1. *Rush University Medical Center, Chicago, Illinois*, 2. *Centers for Disease Control and Prevention, Atlanta, Georgia*

The combined effects of low SES and minority background on health in old age remain poorly understood. We examined racial differences in the cross-sectional association of education with two health indicators – cognitive and physical function performance in older adults. Participants included over 9500 Blacks and Whites, 65 years and older, from the Chicago Health and Aging Project (64% Black, 60% women, mean age = 73 (SD=6.9), mean education = 12 (SD=3.5)), a geographically-defined population-based study of Alzheimer's disease. Education was measured as years of schooling completed. Cognitive function was assessed with four performance-based tests and physical function was assessed using three physical performance tests; composite measures were created and used in analyses. In multiple regression models that controlled for age, age-squared, sex, and race, and their interactions,

Whites and those with higher education performed significantly better on both composite measures. There was also a significant interaction between education and race for both measures (education x race estimate = 0.050, SE=.005, $p < .001$ for cognitive function; 0.095, SE=.024, $p < .001$ for physical function) such that racial differences were substantially greater for those with less than 12 years of education than those with more than 12 years. The results suggest that racial differences may be smaller at higher levels of education, possibly as a result of greater gains with education beyond high school for Blacks compared to Whites. Further, the results suggest that early life factors related to quality of education may need to be considered in studies of SES and health.

RESOURCES USEFUL IN LEARNING ABOUT AGING AND DIVERSITY

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Elders from different ethnic and cultural groups are growing at a much faster rate than those from European American backgrounds. Increased attention is therefore being given to conduct research to enhance our understanding of how the elements of diversity affect the aging experience. However, new research is often not readily accessible to those who work with or are planning to work with diverse elders. This, in turn, creates a gap between the generation of new knowledge and its utilization in addressing the needs of this segment of population. The goal of this poster, therefore, is to share examples of resources that focus especially on aging in diverse populations. Examples include: Specialized journals and monographs that focus on key aspects of aging and diversity (e.g., The journal *Ethnicity and Disease* published by the International Society on Hypertension in Blacks); Internet sites that provide current information (e.g., <http://spiral.tufts.edu> provides selected patient information resources in Asian languages); audiovisual resources that present abstract concepts and principles in a user-friendly manner (e.g., Li Biyiin, a film about a Navajo man who finds out he has diabetes); exercises that engage the participants in active learning (e.g., activities that involve gathering information from the internet and then evaluating the quality of that information); and federally-supported centers that create and disseminate new knowledge focusing on different ethnic groups (e.g., Resource Centers for Minority Aging Research). Making the convention audience aware of these resources will help further the goal of increased utilization of new research on a continuing basis.

ARE THERE RACIAL/ETHNIC DISPARITIES BASED ON ELDERLY HOSPITAL ADMISSION SOURCE?

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Research Objective: Minimizing disparities in health and access to healthcare has been a public health focus. However, disparities continue to exist among minority populations. The researchers examined differences based on racial/ethnic disparities in hospital admission source [physician referral, transfer, and emergency room (ER)] for Medicare beneficiaries. **Population Studied:** Data were from the 2005 Florida Inpatient Discharge Database (n=894,630) consisting of hospital inpatient data, ambulatory surgical data, emergency department data and surgical infection prevention measures. **Study Design:** The cross-sectional study used bivariate, univariate, and multivariate multinomial analyses. The model for hospital admission source was fit using the variables: payer, age, sex, and co-morbidity. Elixhauser methodology was used to group co-morbidities. The model was tested using the Hosmer and Lemeshow Goodness of Fit test. **Principal Findings:** African Americans (AA) were more likely to be admitted to the hospital through transfer (6.7%) vs. physician referral (5.0%) compared to their White coun-

terparts (75.7% and 85.8%) respectively. AA have 1.5 OR (95% CI 1.4-1.6) to be admitted to the hospital via transfer as compared to Whites. Furthermore, AA have 2.0 OR (95% CI 1.9-2.0) to be admitted to the hospital via the ER as compared to Whites. Compared to Whites, Hispanics also have a higher admittance to the hospital via transfers (1.7 OR 95% CI 1.7-1.8), and almost twice the admittance to the hospital via the ER (1.8 OR, CI 1.8-1.9). **Implications for Policy:** Eliminating disparities in referral practices will ensure improved provision of health-care services, increased quality of life, and healthy aging for all.

CULTURALLY RELEVANT NATIVE ELDER MISTREATMENT RESEARCH – A COLLABORATIVE PROCESS

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Elder mistreatment is woefully understudied in the general population, with the field as a whole thought to be several decades behind child maltreatment and domestic violence. With respect to American Indians, the many scientific, practical, and ethical challenges involved in this area of inquiry are compounded by distrust resulting from a historic legacy of research that provided little benefit to Native communities. As a result, very few empirical studies of Native elder mistreatment have been conducted. However, for some time now, American Indians have called for partnership in studies, and Community-Based Participatory Research (CBPR) offers the promise of research that is more mutually beneficial. Here we describe an ongoing effort to collectively develop and pilot a culturally relevant survey on Native elder mistreatment that can be used in future detection efforts with urban and rural tribal communities. The goal of the project is to use what we learn from developing and implementing the pilot study to inform a series of recommendations for identifying the cultural phenomenology and extent of elder mistreatment among American Indians. A core component of the study is a collaboration between two groups: 1) a culturally and geographically diverse panel of community experts with backgrounds in Native elder advocacy and abuse intervention, and 2) an interdisciplinary team of researchers with expertise in American Indian communities. Here we describe our collaborative process, the early findings of the survey, and our initial recommendations for future directions for Native elder mistreatment research.

CAREGIVING AMONG MEXICAN AMERICAN OLDER ADULTS: RESULTS FROM THE H-EPESE STUDY

E.A. Hahn, D.A. Chiriboga, *Aging Studies, University of South Florida, Tampa, Florida*

Elizabeth A. Hahn, David A. Chiriboga, Ph.D. University of South Florida Introduction: In comparison with African Americans or non-Hispanic Whites, Mexican American (MA) caregivers to older adults may experience more distress and burden. Within group differences, such as level of acculturation or family solidarity, may be an important factor to better understand caregiver outcomes in this minority group. The purpose of the present study is to evaluate the correlates and possible consequences of becoming a caregiver among MA older adults. **Methods:** The present study included 187 MA adults from the first wave of the Hispanic Established Populations for Epidemiological Studies of the Elderly (H-EPESE) who had become caregivers within the past year, out of the total sample of 3,050 MA adults over age 65 who comprise the H-EPESE study (a national probability sample study). The Center for Epidemiological Studies Depression (CES-D) Scale, a common measure of well-being, was used to assess depressive symptoms. **Results:** Those who had recently become caregivers reported significantly more depressive symptoms compared to the non-caregivers ($p < .05$). Controlling for gender, education and marital status, regression analyses revealed that greater acculturation was related to fewer depressive symptoms. **Conclusions:** The onset of caregiving among Mexican Americans may be a stressful experience, and specific within group dif-

ferences (such as acculturation) may help understand poor outcomes. A better understanding of cultural aspects of caregiving for Mexican Americans is necessary for this increasing population.

UTILIZATION OF MAMMOGRAPHY AMONG OLDER HISPANIC WOMEN

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Objective: The purpose of the study is to investigate factors that are associated with adherence to yearly mammograms over 5 years among Hispanic women aged 50 and older. **Methods:** A convenience sample of 105 Hispanic women was recruited from Hispanic churches in a New England metropolitan area. Trained interviewers administered the questionnaires, usually in Spanish. Questions pertained to constructs of the Health Belief Model. The reliability coefficients (Cronbach Alphas) for perceived susceptibility, perceived severity, perceived benefits, perceived costs and self-efficacy are .89, .78, .79, .57, .85, respectively. **Results:** The average age was 60.0 (SD=8.7); average years of education was 11.4 (SD=3.7). The majority were from Puerto Rico (83.8%). Ninety-five percent have had a mammogram. They had an average of 3.5 mammograms in the last 5 years. The data show a lack of perception of susceptibility to breast cancer ($M=2.8$; $SD=1.0$), a lack of perceived severity consequences of breast cancer ($M=3.7$, $SD=.86$); and few perceived barriers to mammograms ($M=2.2$, $SD=.74$). The data show modest ratings of the beneficial effects of mammograms ($M=3.7$, $SD=.84$), and self-efficacy in obtaining mammograms ($M=4.1$, $SD=.81$). Low scores on perceived barriers scale ($p<.01$) was significantly associated with high adherence to 5-year annual mammograms as the dependent variable when controlling for other HBM constructs. Items significantly correlated with low 5-year adherence were lack of money, not knowing where one can obtain a mammogram, and lack of time. **Conclusion:** Barriers appear to have the strongest relationship to adherence to yearly mammograms among older Hispanic women.

EXPANDING THE ASSESSMENT OF COPING AMONG DIVERSE GROUPS OF CAREGIVERS

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Coping with the demands of giving care to an older dependent family member can be very rewarding but also stressful for caregivers. They may experience feelings such as anger, stress, and frustration. These feelings can lead to high levels of burden and physical and emotional health problems. Using data from a qualitative study of African American, American Indian, and White dementia caregivers, we developed a 10-item scale to assess how caregivers use the following five coping strategies to manage the range of emotions they experience while giving care: humor, faith, disengaging from the care recipient, preempting conflict with the care recipient, and support-seeking. Using our newly developed coping scale, "Caregiver Coping for Me," telephone interviews were conducted with 200 African American and White caregivers across North Carolina. Caregivers were mainly adult children (64%), White (59%), married (59%), employed (54%), and living with their care recipient (63%). The average age was 57 years and most had at least some college education (59%). Care recipients were an average of 82 years and nearly half (48%) were diagnosed with memory loss. Findings showed that African Americans and Whites differ in coping. African Americans were more likely than Whites to use humor to deal with stressful feelings and more likely to rely on faith. Whites were more likely to disengage from their care recipient by physically and emotionally removing themselves from stressful caregiving situations. However, both African Americans and Whites reported preempting conflict with the care recipient and seeking support from people and organizations.

PROJECT PEARL: FOLLOW-UP DATA FROM A COGNITIVE BEHAVIORAL INTERVENTION TO IMPROVE THE QUALITY OF LIFE OF FRAIL RURAL ELDERS

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Project PEARL (Project to Enhance Aged Rural Living) is a study funded by the National Institute on Aging to test the effectiveness of providing in-home, cognitive behavioral therapy to improve emotional well being and quality of life among older rural adults. One-hundred, thirty-four participants, predominately African-American primarily rural, low resource, and physically-frail, were randomly assigned to either immediate or delayed CBT. The current poster reports on follow-up data for this project. For the purpose of these analyses, data for the two groups were collapsed and matched on the time of assessment (pretreatment, posttreatment, and six-month follow-up). Mixed regression analyses were used to test the effect of treatment on the follow-up outcomes of quality of life (Quality of Life Questionnaire; QOLI) and emotional well-being (Symptoms Checklist-90; SCL-90). Results for the QOLI indicated a change from pretreatment to follow-up ($t = 6.27$, $p < .01$) and no statistically significant change from posttreatment to follow-up ($t = .33$, $p = .75$) indicating maintenance of gain. Results for the SCL-90 indicated a change from pretreatment to follow-up ($t = -3.78$, $p < .01$) and no statistically significant change from posttreatment to follow-up ($t = -.23$, $p = .82$) indicating maintenance of gain. These data suggest that treatment effects can be achieved and maintained with a disadvantaged sample of older adults and suggest that evidence-based treatments delivered through non-traditional means can have effects beyond posttreatment.

DISABLED OLDER ASIANS AND LIVING ARRANGEMENTS: DOES ETHNICITY MATTER?

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The purpose of this study is to examine if older Asians from various ethnic backgrounds response to disability differently in terms of living arrangements. Despite the fact that numbers of older Asians are increasing more rapidly than any other ethnic groups, little is known about disability within this group; nor is there adequate information linking disability and living arrangements within the group. This study compares six Asian ethnic groups (Japanese, Chinese, Korean, Asian Indians, Filipinos, and Vietnamese); the majority of older Asians are from one of these six countries. The data from the 2000 Census 5% Public Use Microdata Sample (PUMS) were analyzed to identify the characteristics of older Asians' living arrangements. In the analysis, individuals living alone and couples living with no other adults in the household are classified as living alone. Interaction terms for disability and ethnicity are included in the analysis to explain living arrangements. Because the process of choosing living arrangements is different for singles and for couples, samples are analyzed separately according to marital status. Results show that, among singles, disability has a significant stronger effect for Korean, Chinese, Vietnamese and Filipinos than for Japanese seniors. For couples, disability has a significant stronger effect for Korean and Chinese than for Japanese senior couples. The results confirm that the effect of being disabled is significantly different across Asian ethnic groups.

OBJECTIVE AND SUBJECTIVE HEALTH AS PREDICTORS OF DAILY PHYSICAL FUNCTIONING OF HISPANIC OLDER ADULTS

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Poor health can lead to decreased day-to-day functioning among older adults. Given Hispanic elders' increased health risks, understanding the relationship of both objective and subjective health measures with daily physical functioning is especially important for this ethnic group. Participants included 3,050 Hispanic adults aged 65 and older, who participated in the baseline assessment of the Hispanic EPESE (Markides, 1999). A structural equation model examining objective health (indicated by number of doctor visits, number of prescription medications, and number of comorbid health conditions) and subjective health (indicated by self-rated health, confidence in ability to be independent, and health control) as predictors of physical functioning (indicated by standing balance performance, ADLs, and IADLs) showed good fit to the data (e.g., CFI=.95, RMSEA=.05); age and education were also included as covariates. Subjective health was positively related to physical functioning ($\beta=.86$, $p<.001$). Although objective health was significantly related to subjective health ($p<.001$), it did not significantly predict physical functioning. In addition, greater age was significantly related to poorer everyday physical functioning ($p<.001$) as well as poorer subjective and objective health; education was positively related to subjective health ($p<.001$), but not to objective health or physical functioning. Approximately 53% of the variance in daily physical functioning was explained by the model. These results illustrate the predictive utility of subjective health perceptions above and beyond more objective indicators of health status. More research is needed to better understand the health perceptions of Hispanic elders and how these map onto their health-related experiences (e.g., service utilization, diagnoses).

INTERGENERATIONAL TRANSFER OF CULTURE PROMOTES OLDER MINORITY ADULTS' HEALTHY AGING

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Social isolation of older adults is well established as a threat to healthy aging, which for minorities is exacerbated by limited English language ability and other barriers to access. This study describes, and reports results of service learning projects targeting social isolation of older minority adults conducted over seven consecutive semesters with four nonprofit organizations, each serving a different minority group (African, Chinese, Latino and Native Americans). Each semester, project formats were (re)designed, tested and evaluated to improve effectiveness. Although a different format was effective for each group, engaging older minority adults in activities focused on intergenerational transfer of culture was effective in all groups. This result is consistent with Gelfand's (2006) suggestion that ethnic identity may buffer negative effects of aging, and with significant support in the literature for the positive effects on older adults of engaging in socially useful activity. Totals participating each semester ranged from 43 to 60 older adults, and 39 to 64 children. Impact on elders has been evaluated using: older adult participant ratings on Likert-type scales that included spaces for open-ended responses; qualitative observation and data analysis by students with support and guidance from the professor; evaluation interviews with each partner organization leader; and results of a focus group with all the partner organizations. Results of evaluation indicate older adults view the activities as very positive (e.g., they consistently indicate they want "more activities like this one"). After the activity, they readily volunteer to discuss and evaluate the activity, and plan future activities.

KNOWLEDGE ABOUT ALZHEIMER'S DISEASE, SHAME, AND AWARENESS OF SERVICES IN KOREAN AMERICAN ELDERS

Y. Jang, D.A. Chiriboga, G. Kim, *University of South Florida, Tampa, Florida*

Early detection of symptoms of Alzheimer's Disease (AD) and successful interventions can be facilitated by knowledge about AD and utilization of relevant services. However, a lack of knowledge, stigma, and an underutilization of services related to AD are often encountered among racial/ethnic minority populations. The present study focuses on an understudied and underserved population: Korean American elders. It was designed to explore predictors of knowledge about AD, stigma, and awareness of AD-related services. Using data with 675 Korean American elders (Mean age = 70.2, SD = 6.87), hierarchical linear or logistic regression models were estimated. Individuals with greater levels of education and acculturation were more knowledgeable about AD. Individuals who reported that having a family member with AD would bring shame were more likely to have lower levels of education and acculturation and to be less knowledgeable of AD. Awareness of AD-related services was more likely among individuals who were married, had greater levels of education and acculturation, and had a family member with AD. Overall, our findings underscore the pivotal role of education and acculturation in predicting knowledge about AD, stigma, and awareness of services. The observed link between knowledge of AD and stigma highlights the importance of knowledge dissemination to racial/ethnic minority communities.

FAMILY CAREGIVING RESEARCH: LEARNING FROM A HARD TO FIND POPULATION

M. Tang, *Social Work Program, The Richard Stockton College of New Jersey, Pomona, New Jersey*

Purpose: This poster highlights some recruitment challenges in conducting family caregiving research. Research implications for ethnic minorities are presented. **Methods:** Data were collected through face-to-face survey interviews with 113 Chinese American caregivers who provided care to their elderly dependent relatives in the San Francisco Bay Area. This study used a snowball sample method. An array of recruitment strategies were used to recruit Chinese American caregivers for this study. The methods included referrals through newspaper outlet, memory disorder centers, adult daycare centers, caregiver support groups, senior centers, senior housing apartments, community organizations, and local churches; and referrals by other caregivers. A \$20 gift certificate was offered to each participant who completed the questionnaire. **Results:** Caregivers were referred through the investigator's network contacts (22.1%), churches (5.3%), social service agencies (15%), caregiver support group (6.2%) and other caregivers (51.3%). **Implications:** A \$20 gift certificate was an effective incentive to recruitment of Chinese family caregivers into this study. Recruitment flyers had been distributed to senior centers, churches, and day care centers. However, only personal contacts with gatekeepers and potential caregivers could effectively facilitate study participation. Successful recruitment required a relationship of trust between members of the Chinese community and the investigator. In working with the Chinese community, the research staff, especially the interviewers, must be fluent in Chinese. Beyond language facility, a familiarity with and understanding of Chinese traditions and behavior is seen as essential to reduce alienation and overcome obstacles to recruitment in the community settings.

USE OF THE GERIATRIC DEPRESSION SCALE IN AFRICAN AMERICAN AND CAUCASIAN MEDICARE BENEFICIARIES

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The 15-item version of the Geriatric Depression Scale (GDS-15) has been widely used to assess depressive symptoms in older adults. This investigation examined the psychometric properties of the scale in a sample of 1,000 community-dwelling African American and Caucasian Medicare beneficiaries. The sample was 50% Caucasian, 50% female, and 51% rural with a mean age of 75.3 years (SD=6.7). An exploratory factor analysis that utilized principle components extraction was performed to examine the factor structure of the GDS items, and a promax rotation was utilized because the extracted factors were believed to be correlated. The scree plot suggested a two-factor model (Depression and Life Satisfaction) best fit the data. Separate models for African American and Caucasians also provided evidence to support a two-factor model in each subgroup although some differences were observed in the factor loadings between groups. Construct validity for the factors was explored by correlating them with social support, anxiety, and physical and mental health composites of the SF-12. The factors had moderate correlations with anxiety and mental health with the absolute value of Pearson's r ranging from 0.37 to 0.53, p 's<.0001. The factors were also significantly related to social support and physical health, p 's<.0001. Results provide evidence that the GDS-15 is appropriate to use in samples of African American and Caucasian community dwelling older adults. Investigators must consider potential racial differences in the factor structure of instruments before deciding to use brief versions of these scales in samples that are comprised of more than one racial group.

LATE LIFE MINORITY RECRUITMENT IN A RANDOMIZED CLINICAL TRIAL FOR ANXIETY

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Effective treatment for older adult minorities is needed to reduce disparity in health services. Recruiting older adult minorities in research has been a challenge. Recruitment for underrepresented subjects is examined for a randomized clinical trial of cognitive behavior therapy in primary care for late life Generalized Anxiety Disorder (GAD). Recruitment primarily occurs through letters sent by the providers of two primary care clinics to potential participants introducing the project, and research staff follow-up by phone. Participants are eligible if they are 60 years or older and have a principal or co-principal GAD with no active psychosis, substance abuse, bipolar or suicidal intent. To date, 76 participants have signed consent and 66 have completed the diagnostic assessment. The reasons for signing consent but not continuing to diagnostic assessment included a negative screen for anxiety ($n = 1$) and loss of contact or withdrawal ($n = 9$; 78% African Americans). Of the 66 participants who completed diagnostic assessment, 19 (29%) are minority participants (13 African American; 4 Hispanic, 1 Asian; 1- Multi-Race). However, only 26% (5 of 19) of minorities compared to 60% of Caucasians (28 of 57) met inclusion criteria. Reasons for exclusion for minority ethnic groups are no psychiatric diagnosis ($n = 3$), GAD not primary ($n = 3$); and no GAD ($n = 8$). It appears that we are obtaining consent from a representative sample, but inclusion rates are meaningfully different between minority and non-minority subgroups. Examining where underrepresented populations leave the study will inform strategies to improve minority recruitment.

THE RELATIONSHIP BETWEEN COGNITION AND INFLAMMATION IN BLACK AND WHITE OLDER ADULTS

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Studies suggest that higher levels of inflammation are associated with poorer cognitive performance. Despite consistent findings that older Blacks have higher inflammation and poorer cognitive performance compared with older Whites, few studies have examined racial differences in the inflammation-cognition association. The objective of this study was to examine racial differences in the cross-sectional association of inflammation levels (as measured by blood serum levels of CRP, IL-6, and TNF- α) and cognition in a sample of 728 community-dwelling Black and White elders participating in the Rush Minority Aging Research Study or Rush Memory and Aging Project (mean age = 77.2 (SD=7.0); mean education = 14.8 (SD=3.2); mean MMSE = 27.8 (SD=2.4); 43% Black). Participants were administered 19 cognitive tests from which composite measures of 5 cognitive domains were derived. In multiple linear regression analyses, controlling for age, education, sex, and BMI, both IL-6 and TNF- α were associated with lower performance on global cognition and all 5 cognitive domains (all p 's < .01); CRP was associated only with lower perceptual speed and visuospatial ability (both p 's < .01). After controlling for race, only TNF- α continued to be associated with lower global cognition and perceptual speed. No interaction terms for race and the markers were significant. Overall, these findings suggest that higher levels of serum inflammation markers are associated with poorer cognitive performance but provide little support for racial differences in the association of inflammation and cognition. Future research should consider the effects of inflammation on longitudinal changes in cognition in diverse samples.

COMPLEMENTARY AND ALTERNATIVE MEDICINE: USE AND PROVIDER COMMUNICATION BY DIVERSE GROUPS

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About half of older adults in the United States use complementary and alternative medicine (CAM). Relatively little is known about how CAM use, or reporting CAM use to medical providers, differs among older adults by race/ethnicity. Data were from the 2007 National Health Interview Survey and its CAM supplement. Analyses, stratified by sex, included chi-square and multivariate logistic regression, accounting for the survey design and weighted for national representativeness. Racial/ethnic groups were non-Hispanic African Americans, Hispanics, Asian Americans, and non-Hispanic whites (whites). Controls included age, education, marital status, health insurance, comorbidities, body mass index, and region. We examined CAM defined both including and excluding vitamins; reported results, for ages 50+ (10,104 respondents), include vitamins. In multivariate analyses, compared with whites, CAM use was significantly less common among African Americans (odds ratio, OR 0.77), Hispanics (OR, 0.73), and Asian Americans (OR 0.90) (all p <.001). Among all CAM users, 60.9% reported telling a provider; 53.9% of African Americans, 49.8% of Hispanics, 59.1% of Asian Americans, 62.5% of whites (p <.0001). In adjusted results for women, African Americans, Hispanics, and Asian Americans were less likely to tell a provider than were whites (ORs 0.66, 0.54, 0.61, respectively, all p <.001); results were similar for men. Results for CAM defined without vitamins were similar. Findings suggest there may be opportunities to promote CAM use with established health benefits among older minorities. Because CAMs, e.g., herbal supplements, can interact with conventional therapies, providers should inquire about CAM use, particularly among older patients in minority groups.

TRAJECTORY OF LIFE SATISFACTION AMONG OLDER MEXICAN-AMERICANS

N.H. Fultz, J.M. Bennett, J. Liang, *School of Public Health, University of Michigan, Ann Arbor, Michigan*

Life satisfaction is a key component of subjective well-being, an important concept in social gerontology since the 1950's. A cognitive evaluation of one's life as satisfying or congruent with one's goals, life satisfaction is thought to be relatively stable over time. Nonetheless, current knowledge is largely based on cross-sectional studies, which confound intrapersonal changes with interpersonal differences. A more complete understanding requires an examination of the level and shape of the trajectory of life satisfaction over an extended period of time. Further, although SWB has been examined extensively among white Americans, studies involving ethnic minorities are relatively rare. This is especially true for Mexican-American older adults. Data for this research came from the Hispanic Established Populations for Epidemiologic Studies of the Elderly (HEPESE), which were collected in 1993, 1995, 1998, 2000, and 2004, yielding 10,317 observations from 3,050 respondents. To chart the trajectory of life satisfaction, Hierarchical Linear Modeling (HLM 6.06) was undertaken, with life satisfaction measured by using a single-item rating of one's life. Older Mexican-Americans showed a very slight, but statistically significant, decrease in life satisfaction over time. Covariates included demographic characteristics, SES, acculturation, social support, health status, and financial strain. The trajectory of life satisfaction was significantly associated with a number of variables including age, gender, social support, and physical health.

CULTURAL MODELS OF "BENIGN SENESCENT FORGETFULNESS" VS. ALZHEIMER'S IN THREE U.S. ETHNIC GROUPS

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"Benign senescent forgetfulness" is meant to describe the normal pattern of memory lapses associated with aging in contrast with the pathological processes of Alzheimer's disease. In one sense the common, quotidian, unmarked experience of forgetting this-or-that has now become a worrisome borderland between "safe" aging (never mind "successful") vs. unthinkable degenerative decline. However, some bioethicists have argued that this is a particularly cultural phenomenon seen especially in the "hypercognized" culture of the US where self-control, independence, and autonomy are threatened by cognitive impairment. Thus, in the US, Alzheimer's has come to frame aging rather than vice-versa. This poster addresses whether individuals from alternate cultural backgrounds—older Russians, older Mexicans, and older African-Americans—show the same re-framing of normal aging under the influence of Alzheimer's. To wit, we assessed whether samples from each group had a single, coherent model of AD vs. normal memory loss. Results from the consensus analysis showed that in fact all three groups expressed coherent, largely scientific models of Alzheimer's (ratios of 1st to 2nd eigenvalue: African Americans 6.15, Russians 4.64, Mexicans 6.87). However, concerning models of normal memory loss, only African Americans showed a single, coherent model (3.62) whereas Russians (2.97) and Mexicans (2.08) did not. We believe this reflects cultural differences whereby African Americans share the hypercognized themes of US culture, whereas the older Russians and Mexicans do not. In essence, the 'benign-ness' of memory loss seems to depend on cultural background.

SESSION 975 (SYMPOSIUM)

SOCIO-CULTURAL AGING

Chair: H. Fung, *Chinese University of Hong Kong, Hong Kong SAR, China*

Discussant: D. Isaacowitz, *Brandeis University, Waltham, Massachusetts*

This symposium aims at shedding light on how socio-cultural forces may shape aging processes. The first two papers describe how older adults may react to the same social interactions differently depending on their relationships with the particular social partners. Cheng and colleagues examined the association between negative social interactions and psychological well-being among three different relationships: relationships with a member of the vertically extended family, a member of the horizontally extended family member, and a nonkin. You and Fung then focus on anger responses and report a study that compared how younger and older adults from Hong Kong and Mainland China reacted to imagery anger-eliciting scenarios when the perpetrator was a family member, a close friend or an acquaintance. The next two papers are about how cultural contexts shape social relationships. In contrast to the well-established finding in the American literature that negative social exchanges are negative, Fung and colleagues found among Chinese, across adulthood, that negative social exchanges increased emotional closeness over a 2-year period. Yeung and colleagues also found that interdependent self-construal helped Chinese, particularly older Chinese, to benefit more from peripheral social partners. Finally, Sims and colleagues present a model that shows how cultural views of aging among European-Americans and Chinese-Americans explain their ideal affect across adulthood. Taken together, these papers illustrate the multiple ways through which socio-cultural contexts may define and guide socioemotional development across adulthood.

NEGATIVE INTERACTIONS AND PSYCHOLOGICAL WELL-BEING: DO SOURCES OF NEGATIVE EXCHANGES MATTER?

S. Cheng¹, K. Li², *1. City University of Hong Kong, Hong Kong SAR, China, 2. University of Hong Kong, Hong Kong SAR, China*

Close relationships are important to positive aging. However, negative interactions are more frequent among immediate family members than among distant family and friends. A question arises: Are negative interactions with immediate family less distressing because one becomes habituated to them over time, or more distressing because they represent annoyances or hostilities that would not easily go away. In this study of 1,005 older adults in Hong Kong, we tested if the effect of negative interactions on psychological well-being differs, depending on whether the person is a member of the vertically extended family (spouse, children and grandchildren), a member of the horizontally extended family member, or a nonkin. Results showed that negative interactions accounted for lower well-being in all relationship types, but the effect was slightly stronger in the vertically extended family. The results are discussed in terms of the emphasis on familism and norm for harmony in Chinese societies.

ANGER RESPONSES UNDER RELATIONAL CONTEXTS: A COMPARISON OF YOUNGER AND OLDER ADULTS FROM HONG KONG AND MAINLAND CHINA

J. You, H. Fung, *Chinese University of Hong Kong, Hong Kong, China*

This study examined individuals' anger responses under relational contexts among younger and older adults from Hong Kong and Mainland China. Our sample included 108 Hong Kong Chinese (40 younger, 68 older) and 101 Mainland Chinese (35 older, 66 younger) to assess their anger experience, motives and behavioral responses toward family members, close friends or casual friends using 9 imaginary anger-eliciting scenarios. Considering the results of anger experience, Hong Kong older adults displayed the lowest level of stream motives in close

friendships whereas Mainland Chinese older adults displayed the highest level of stream motives in kinships. Moreover, we found that only the younger Mainland Chinese adults expressed the lowest level of malevolent motives in kinships than in friendships. For the motives across kinships, causal friendships and close friendships, only the younger adults from the Mainland China showed significantly higher level of constructive motive. Also, results from behavioral responses found that younger Hong Kong Chinese showed significantly higher level of direct aggression in kinships than in casual friendships. However, younger Mainland Chinese had significant higher level of non-aggression across all three relationship contexts. Finally, all the participants displayed highest level of indirect aggression and cognitive reappraisal in casual friendships than in kinships. Our investigation explores and contributes to the understanding of emotion under different relational contexts from two different Chinese samples.

NEGATIVE SOCIAL EXCHANGE INCREASES EMOTIONAL CLOSENESS

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Negative exchange in social relationships has traditionally been studied as having negative consequences. This study explored whether it might have positive effects for relationship closeness. Sample included 351 adults, aged between 18 and 91 years, residing in Hong Kong, China. Closeness of social partners to the participants was measured by the Social Convoy Questionnaire, and the levels of negative exchange, instrumental support and emotional support of each social partner were assessed. Multi-level analyses revealed that moderate levels of negative exchange were positively associated with increases in closeness over a 2-yr period, even after statistically controlling for instrumental support and emotional support. This positive relationship was observed to a greater extent among kin than among non-kin.

HOW COULD PERIPHERAL PARTNER BENEFIT OLDER ADULTS IN A LONG RUN

D. Yeung¹, X. Zhang², H. Fung², 1. *City University of Hong Kong, Hong Kong SAR, China*, 2. *Chinese University of Hong Kong, Hong Kong SAR, China*

This study examined the relationship between social network composition (SNC), interdependence self-construal and loneliness over two years. A sample of 365 Hong Kong Chinese adults aged between 18 and 92 years participated in two phases of assessment. Hierarchical regression analyses revealed that age moderated the relationship between interdependence self-construal and the number of emotionally close social partners. In particular, the positive association between interdependence and the number of emotionally close social partner was only significant for older adults but not for younger adults. Moreover, the number of peripheral partners partially mediated the relationship between interdependence and loneliness. Higher levels of interdependence were associated with lower levels of loneliness, and this association was partially mediated by having more peripheral partners in social networks. However, this mediation effect was only found among older adults but not among younger adults. These findings qualify prior research on the benefits of SNC to older adults.

YOU'RE AS YOUNG AS YOU WANT TO FEEL: CULTURAL VARIATION IN IDEAL AFFECT ACROSS THE LIFESPAN

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Compared to American culture, Chinese culture is less youth-oriented and more accepting of old age. Do these different cultural views

of aging influence how people want to feel across the life span? Our findings suggest that they do: consistent with the American emphasis on youthfulness, European American older adults (60-79 years) wanted to feel excitement states as much as did European American younger adults (20-39 years), whereas Chinese American older adults wanted to feel excitement states less than did their younger counterparts. Moreover, whereas Chinese American older adults' ideal affect was consistent with what they wanted in their daily lives, European American older adults' ideal affect was not, suggesting that Chinese Americans are more accepting of age-related changes in ideal affect than are European Americans. We discuss the implications of these findings for understanding wellbeing in later life.

SESSION 980 (SYMPOSIUM)

THE DYNAMIC NATURE OF STRESS AND WELL-BEING: SHORT-TERM VARIABILITY FROM A LIFESPAN PERSPECTIVE

Chair: A. Brose, *Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany*

Discussant: S. Neupert, *North Carolina State University, Raleigh, North Carolina*

Well-being and stress constantly vary over short periods of time, such as days, and undergo developmental change over years and decades. This symposium focuses on short-term variability in stress as indicated by variation in affective reactivity, stressor-type and -appraisal, as well as cortisol and cardiovascular activity. It highlights the importance of studying short-term functioning for understanding long-term developmental change. Participants of the symposium will learn (a) about different kinds of variability such as meaningful variation in relation to changing situations and variability as person characteristic (b) how age group differences in variability relate to theories and findings on developmental change in the domains of stress and well-being. In addition, diverse methodological approaches toward studying within-person variability will be explained. Stawski et al. investigate variation in affective reactivity as a function of stressor appraisal and stressor type across the adult life span. Brose et al. show that individuals' affective reactivity varies across time and they analyze transient influences on reactivity such as current health condition. Deboeck and Bergeman illustrate associations between short-term fluctuations in stress, long-term change, and distal well-being outcomes. Piazza et al. demonstrate age- and gender specific differences in within-person variability of cortisol response to awakening. Results by Wrzus et al. suggest age-related differences in physiological reactivity to and recovery from stress. In sum, this symposium provides an overview on recent conceptual and methodological approaches to the experience of stress across the lifespan, including psychological and physiological outcome variables.

LINKING DAILY STRESSORS TO NEGATIVE AFFECT: THE IMPORTANCE OF SUBJECTIVE APPRAISALS AND EVENT TYPE

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An assumption of psychological theories of stress is that subjective appraisals of stressful events are important for understanding the effects of these events on health and well-being. However, it is unclear whether the influence of subjective appraisals is invariant across different types of stressful events. Respondents included 1,265 adults (Mean Age = 57, SD = 12, Range = 33-84, 56% Female) from the second wave of the National Study of Daily Experiences. We examined whether subjective ratings of event severity were associated with negative affect (NA) during that particular event. Participants reported on their daily stressful experiences and NA during these experiences during telephone interviews on eight consecutive evenings. Results revealed that the subjective appraised severity of the events was positively related to the level

of NA experienced during that event ($p < .01$). Furthermore, the degree to which subjective severity influenced NA depended on the type of event ($p < .01$).

AFFECTIVE REACTIVITY TO DAILY HASSLES VARIES WITHIN INDIVIDUALS: TRANSIENT INFLUENCES IN YOUNGER AND OLDER ADULTS

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Being exposed to daily hassles impairs affective well-being. The strength of this association is moderated by, for example, personality characteristics or current levels of perceived stress. The latter points to the importance of transient influences on how individuals react to hassles. The present study investigates three types of time-varying influences on affective reactivity: whether an epoch surrounding a stressor is characterized by (a) heightened exposure to events and, (b) perceived stress, and (c) bad health. We tested 101 younger (20-30) and 103 older (65-80) adults in 100 daily sessions. By means of 3-level multilevel modeling, variation in within-person affective reactivity across time was identified when the 100-days phase was divided into smaller epochs. First evidence supports the assumption that epoch-specific exposure to events, perceived stress, and health condition predict within-person variation in affective reactivity. Age-group differences in these influences will be discussed from the perspective of lifespan theory.

RELATING INTRAINDIVIDUAL CHANGE AND VARIABILITY: PREDICTING 3-YEAR CHANGES FROM DAILY VARIABILITY IN OLDER ADULTS

P.R. Deboeck¹, C. Bergeman², *1. University of Kansas, Lawrence, Kansas, 2. University of Notre Dame, Notre Dame, Indiana*

There are interindividual differences in the aging process, with some individuals appearing to be more resilient to the changes that occur with advancing age. This resiliency is often postulated to affect how individuals change in both short-term (days) and in the long-term (years). If this is the case, then there should be relationships evident between short-term intraindividual variability and long-term intraindividual change. This study examines the data of a large sample of older adults from the Notre Dame Longitudinal Study on Aging. Using Derivative Variability Analysis, we examine daily and weekly variance in observed scores and the rates at which stress is changing, and whether this variability is predictive of well being outcomes over the course of three years. Relationships between short-term variability and long-term outcomes may help inform the changes that can be made on a daily or weekly time scale to promote healthier aging.

INTRA-INDIVIDUAL VARIABILITY IN THE CORTISOL AWAKENING RESPONSE: AN EXAMINATION OF AGE AND GENDER

J.R. Piazza, R.S. Stawski, D. Almeida, *Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

The cortisol awakening response (CAR) exhibits a high degree of intra-individual stability, leaving some researchers to conclude that any remaining variability may simply be reflective of error variance. Intra-individual variability in the CAR, however, may also reflect systematic changes in the HPA axis. To explore this possibility, the current study examined age and gender differences in intra-individual variability in the CAR using a national sample of adults between the ages of 35 and 85. Results revealed a significant age by gender interaction, indicating that although no systematic age-related differences emerged for women, intra-individual variability in the CAR response increased with age among men ($p < .01$). Whereas younger men showed the lowest levels of intra-individual variability, older men showed the highest levels of intra-

individual variability—levels comparable to women of any age. Findings will be discussed in terms of theoretical and practical significance.

GETTING OLDER, GETTING WISER - AND LESS STRESSED? AGE DIFFERENCES IN AFFECTIVE EXPERIENCE AND PHYSIOLOGICAL RESPONDING TO STRESS

C. Wrzus¹, M. Riediger¹, V. Müller¹, G.G. Wagner^{1,2}, U. Lindenberger¹, *1. Max Planck Institute of Human Development, Berlin, Germany, 2. Socio-Economic Panel Study, Berlin, Germany*

Recent life-span theories suggest that the ability to regulate one's affect improves during the second half of life. Empirical evidence supporting this claim, however, is sparse. In addition, even though it is generally acknowledged that affective reactions involve experiential, behavioral, and physiological components, available investigations have mainly focused on subjective self-evaluations. To overcome this limitation, we investigated age-related differences in within-person trajectories of affective experiences and cardiovascular responding to a stressful experience. 92 participants aged 14 to 84 years were exposed to a cognitive-social stressor in between two resting phases. Cardiovascular activity and breathing were constantly monitored, and momentary affective experiences were repeatedly assessed. Results demonstrate age-related differences in physiological reactivity to, and recovery from, the stressor as well as in the association between subjective affective and physiological reactivity. Implications of these findings for the understanding of lifespan differences in affective self-regulation are discussed.

SESSION 985 (SYMPOSIUM)

THE NEW DYNAMICS OF AGEING PROGRAMME

Chair: A. Walker, *University of Sheffield, Sheffield, United Kingdom*
Discussant: A. Matthews, *Canadian Institute on Aging, Vancouver, British Columbia, Canada*

The key objective of this symposium is to report findings from the New Dynamics of Ageing (NDA) Research Programme. The NDA is the largest programme of ageing research ever mounted in the UK (and Europe) and comprises 34 individual projects which together span all of the major disciplines, from Arts and Humanities to Biological Sciences. The NDA Programme is investigating the multidisciplinary factors that account for the changing dynamics of ageing and, critically, searching for ways to ensure that new scientific research benefits the ageing population. In this symposium some of the early results from the Programme will be showcased. The individual contributions have been chosen to provide an interesting cross-section of projects. A short introduction will be provided, by the chair, about the NDA Programme in order to put the individual papers in context (no abstract submitted for this short introduction). There are four individual papers covering older people's views on the maintenance of dignity and the preservation of self especially in interaction with health professionals; vulnerability to financial abuse among cognitively impaired older people navigate familiar and unfamiliar urban spaces. As well as NDA Programme participation the thread that connects each of these project presentations is the combination of high quality science with a policy or practice orientation aimed at rapid and effective knowledge transfer.

MAINTAINING DIGNITY IN CIRCUMSTANCES OF DEPENDENCY: OLDER PEOPLE'S VIEWS

L. Lloyd, K. White, *University of Bristol, Bristol, United Kingdom*

This paper presents preliminary findings from research with 40 people aged 75 and over, who depend on others for care and support in everyday life. We aim to obtain participants' perspectives on dignity and on their thoughts about the future. Information is gathered through interviews conducted periodically over a period of 2-3 years. Emerging findings reveal a range of experiences, including both humiliating and respectful practices by health professionals. There are clear differences in participants' perceptions of dignity as well as in their ability to stand

up to undignified treatment. Initial analysis suggests that a life-course perspective is essential for understanding these differences. The research offers a dynamic perspective that takes account of the relationship between past, present and future in terms of the development of individual identities, challenges to dignity, interpersonal relationships and perspectives on the future.

ROUTINISING THE DAY AND NIGHT BEYOND RETIREMENT: CONSEQUENCES FOR POOR SLEEP IN LATER LIFE

S. Venn, S. Arber, *Department of Sociology, University of Surrey, Guildford, United Kingdom*

This presentation is based on one element of a large multi-disciplinary research project, SomnIA (Sleep in Ageing) which is researching sleep among older people. Qualitative in-depth interviews with 62 older people living in their own homes demonstrated that most people felt sleep quality and quantity had declined with age. Retirement ostensibly brought freedom from the routines and structures which may have previously curtailed opportunities for sleep. However, time spent in bed, and napping during the day, were believed to be both an indicator of aging, and linked to a sense of guilt at 'wasting time'. Therefore many people did not take advantage of this freedom from routines, and they continued to set their alarms early in the morning, and avoided sleeping during the day. This presentation examines the juxtaposition between sleep needs in later life, post-retirement routines in later life, and older people's perceptions of their ageing identity.

DETECTING AND PREVENTING FINANCIAL ABUSE OF OLDER ADULTS: AN EXAMINATION OF DECISION MAKING BY MANAGERS AND PROFESSIONALS IN HEALTH, SOCIAL CARE AND BANKING

M.L. Gilhooly, *School of Health Sciences and Social Care, Brunel University, Uxbridge, England, United Kingdom*

With increasing numbers of cognitively impaired older people cared for in the community, there are growing challenges associated with money handling. Financial abuse of vulnerable older people is of growing concern. It is equally important to protect professionals and carers from unfair allegations of financial abuse. The aim of this project is to examine decision-making in relation to the detection of financial elder abuse. Health, social care and banking professionals are the focus of this study. There are three phases to this study: Phase I - In-depth interviews, using critical incident methods, with health, social care and banking professionals. Phase II - Experiments aimed at testing hypotheses about decision-making using case scenarios: Phase III - Examination of policy documents and guidelines. This research is funded by the UK New Dynamics of Ageing Programme. The aim of this presentation is to present findings from Phase I of the study.

NAVIGATION IN FAMILIAR AND UNFAMILIAR TOWN CENTRES

J.E. Phillips, *Swansea University, Swansea, United Kingdom*

As town landscapes change through regeneration or decline, the use of space changes and previously familiar places may become unfamiliar. Unfamiliarity can lead to insecurity, disorientation, fear over personal safety, social exclusion and loss of independence. The present study investigates visits to familiar and unfamiliar town centres by two groups of participants aged 60+ years. Participants who evidenced difficulty in following directions stayed in populated areas and relied on street signage. The participants who had no difficulty used landmarks in the built environment and asked local people for directions. In a social network analysis, participants who follow directions were more "adventurous" travelling to more unfamiliar towns using different modes of transport and travel arrangements. The research informs spatial planners about how to improve navigation of built environments that contain services and facilities that are important to independence.

TACKLING AGEING CONTINENCE THROUGH THEORY, TOOLS AND TECHNOLOGY (TACT3)

E. van den Heuvel, *Brunel University, Uxbridge, United Kingdom*

The overall aim of the TACT3 project is to reduce the impact of continence difficulties for older people by investigating three different research areas. 1) Investigating continence care Is specialist continence care is significantly better than standard continence care? Exploring the views of patients, family and healthcare professionals, the advantages of specialist continence care and barriers to seeking treatment will be investigated. 2) Investigating the problems older people have finding and using toilets when they are away from home. Exploring challenges facing toilet providers.. Designing public toilets that would better suit the needs of older adults. 3) Developing two products that have been requested by continence pad users. 1) urine odour detector that will warn that the pad needs changing before any odour is detected by the human nose. 2) smart underwear that will detect a pad leak immediately, giving warning before the leak spreads to outer clothes.

SESSION 990 (SYMPOSIUM)

THE PERSISTENCE AND REDUCTION OF FEAR OF FALLING IN COMMUNITY-DWELLING OLDER PERSONS

Chair: G. Kempen, *School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands*

Discussant: B. Resnick, *University of Maryland School of Nursing, Baltimore, Maryland*

Fear of falling is considered a substantial health concern, particularly when this results in avoidance of activity. Prevalence rates for fear of falling in community-dwelling elderly range from 20 to 60% and for avoidance of activity due to fear of falling from 15 to 55%. Fear of falling is suggested to be a potential health problem of equal importance to a fall. Self-induced activity restriction due to fear of falling may lead to decreased physical, psychological, and social functioning. These adverse consequences require knowledge about the pathways of fear of falling and preventive strategies to reduce fear of falling. During this symposium findings from four studies performed among different populations of elderly in three different countries will address the persistence and the reduction of fear of falling in old age. First, the persistence and variability of fear of falling in a community population (N=170) participating in an exercise behavior study was analyzed monthly over a period of 9 months in the US. Second, a study was conducted to determine the effect of a 10-week, low intensity, exercise training program on fear of falling and gait in 50 community-dwelling volunteers in Switzerland. Third, the cost-effectiveness of a cognitive-behavioral group program to reduce fear of falling and avoidance of activity in 540 community-dwelling older people in the Netherlands is presented. And fourth, differential effects of this cognitive-behavioral group approach to reduce fear of falling was studied: who is to benefit the most? Our discussant will complete this symposium by addressing issues in a more general context.

PERSISTENCE AND INTENSITY OF FEAR OF FALLING IN OLDER ADULTS

H. Lach, J. Kraenzle Schneider, *School of Nursing, Saint Louis University, St. Louis, Missouri*

Persistence of fear of falling (FOF) is a concern to researchers. We measured FOF monthly for 9 months in 170 older adults participating in a larger RCT to increase exercise behavior (mean age 72.4±5.4, 77.6% female, 87.1% White). Using a 1-10 point scale, participants reported how fearful they were that they might fall. FOF scores were averaged across months for participants, then correlated with functional measures, exercise behavior, and SF-36 subscales. Using 9-month outcome measures, FOF was positively related to timed up-and-go test ($r=.25$, $p=.002$) and negatively related to 6-minute walking distance ($r=-.34$, $p=.000$), self-reported physical functioning ($r=-.30$, $p=.000$), role ful-

fillment-physical ($r=-.25$, $p=.001$) and emotional ($r=-.21$, $p=.007$), energy ($r=-.22$, $p=.005$), social functioning ($r=-.27$, $p=.001$), and general health ($r=-.22$, $p=.006$). Increased frequency and intensity of fear is associated with more negative outcomes, even when participant responses are variable. Support by Grant NR04771.

EVOLUTION OF GAIT PERFORMANCE AND FEAR OF FALLING AFTER A 10-WEEK PROGRAM OF EXERCISE TRAINING IN COMMUNITY DWELLING OLDER PEOPLE

C.J. Bula¹, E. Martin¹, K. Aminian², B. Najafi², C. Piot-Ziegler³, S. Rochat¹,
1. Geriatrics, University of Lausanne Medical Center, Lausanne, Switzerland, 2. EPFL, Lausanne, Switzerland, 3. Psychology Unit, University of Lausanne, Lausanne, Switzerland

A pilot study was conducted to determine the effect of a 10-week, low intensity, exercise training program on fear of falling and gait in fifty (mean age 78.1 years, 79% women) community-dwelling volunteers. Fear of falling (measured by falls self-efficacy) and gait performance were assessed at baseline and one week after program completion. At follow-up, participants modestly improved their falls self-efficacy and gait speed. To investigate whether this effect differed according to participants' fear of falling, secondary analyses stratified by subject's baseline falls efficacy were performed. Subjects with lower than average falls efficacy improved significantly their falls efficacy and gait performance, while no significant change occurred in the others. Small but significant improvements occurred after this pilot training program, particularly in subjects with low baseline falls efficacy. These results suggest that measures of falls efficacy might be useful for better targeting individuals most likely to benefit from similar training programs.

COST-EFFECTIVENESS OF A GROUP PROGRAM REDUCING FEAR OF FALLING: RANDOMIZED CONTROLLED TRIAL

G. Kempen, G. Zijlstra, M. Hendriks, M. Goossens, J. Van Eijk, J.C. van Haastregt, School for Public Health and Primary Care, Maastricht University, Maastricht, Netherlands

This cost-effectiveness study was embedded in a two-group randomized controlled trial. We compared the costs and effects of an 8-week cognitive behavioral group intervention conducted by trained nurses ($N=280$) with those of usual care ($N=260$). Clinical outcomes were fear of falling and associated avoidance of activity. Direct healthcare costs included costs related to consultations of general practitioners, physiotherapists and specialists, hospital days, hours of domestic help and professional home care, home adaptations, aids, and assistive devices until 14 months after the intervention. The costs for the program were on average [€276 per person in the intervention group. The total direct healthcare costs per person (including intervention costs) were somewhat higher in the intervention group (€4,925) compared to the control group (€4,828). This difference was not statistically significant ($p=.899$). Only the costs for physiotherapy were significantly lower in the intervention group, compared to the control group (€295 versus €509, $p=.007$).

AN APPROACH TO REDUCE FEAR OF FALLING IN COMMUNITY-LIVING OLDER PEOPLE: WHO IS TO BENEFIT THE MOST?

G. Zijlstra^{1,2}, J.C. van Haastregt^{1,2}, G. Kempen^{1,2}, 1. Dept. of Health Care and Nursing Science, Maastricht University, Maastricht, Netherlands, 2. School for Public Health and Primary Care, Maastricht, Netherlands

Results of an RCT showed the effectiveness of a cognitive behavioral intervention on concerns about falling in community-living older people. This study explored who is most likely to benefit from this group intervention. The sample comprised 540 community-living older people. Potential effect modifiers, like age, gender, educational level, per-

ceived health, falls history, fear of falling at baseline, and intervention compliance, were studied regarding concerns about falling at short- and long-term follow-up. Mixed-effects regression analyses showed significant subgroup effects at short-term follow-up for males ($p=.05$), participants with poorer perceived health ($p=.02$), participants with >2 falls in the 6 months prior to baseline ($p=.04$), and for participants with higher levels of fear of falling at baseline ($p<.01$). Additionally, compliers were more likely to benefit from the intervention (short-term: $p=.01$; long-term: $p=.03$). These outcomes underscore the importance of intervention compliance and indicate that the program's effectiveness can be improved in certain subgroups.

SESSION 995 (SYMPOSIUM)

TRAUMA, AGING, AND THE LIFE COURSE

Chair: E.H. Davison, National Center for PTSD, VA Boston Healthcare System, Boston, Massachusetts, Department of Psychiatry, Boston University School of Medicine, Boston, Massachusetts

Discussant: A. Spiro, Massachusetts Veterans Epidemiology Research and Information Center, VA Boston Healthcare System, Boston, Massachusetts

The potential lifelong impact of traumatic events on aging persons is often overlooked in both research and clinical practice, yet it may have important implications for current health and behavior. A growing body of research demonstrates that older trauma survivors may be both more vulnerable and more resilient when faced with the vicissitudes of aging. With the aim of bringing together clinicians, researchers, and policymakers interested in the unique ways in which trauma experienced across the life course interacts with the aging process, an informal interest group called "Trauma, Aging, and the Life Course" recently convened at the Gerontological Society of America; the papers today represent the work of several interest group members. In the first paper, Aldwin, Spiro, and Kang examine the relationships among combat exposure, post-traumatic stress symptoms, and mortality in aging World War II and Korea era military veterans. Next, Glicksman considers the methodological challenges of studying trauma in the elderly, using research with Holocaust and Soviet WWII survivors to illuminate these challenges. Aydin then discusses the buffering effects of formal health care resources against depression in post-Civil War Lebanese elders. Finally, the Kahanas examine elders' coping in the face of a life-threatening cancer diagnosis, and propose a new theoretical model to illustrate how coping strategies may be more flexible and more targeted than previously assumed. Taken together, these papers exemplify the richness and breadth of the current research in life-course trauma and aging, and suggest directions for future inquiry and application.

COMBAT EXPERIENCE AND MORTALITY AMONG WWII AND KOREA ERA VETERANS

C.M. Aldwin¹, A. Spiro², S. Kang¹, 1. Human Dev. & Fam. Sci., Oregon State University, Corvallis, Oregon, 2. Boston University School of Public Health, Boston, Massachusetts

The relationships among PTSD, combat exposure and mortality in late life are complex. While PTSD is consistently associated with mortality in later life (Keehn et al., 1974; Boscarino, 2006a), the effect of combat exposure on mortality varies by measure and war (Boscarino, 2006b; Bramsen et al., 2007). We investigated the relationship between combat exposure, PTSD, and mortality in 961 WWII and Korea era veterans whose combat experience was assessed in 1990 (Mage = 65.44, SD = 6.42). Controlling for age, smoking status, and pre-existing disease (coronary heart disease, cancer, and diabetes), we found that having moderate combat exposure (HR = .716, 95% CI = .530-.967) and low PTSD symptoms (HR = .677, 95% CI = .513-.893) was protective against premature mortality. Veterans with moderate combat exposure

who avoid illness in mid-life experience better longevity in later life than those with little or heavy combat exposure.

STUDYING TRAUMA IN THE ELDERLY: METHODOLOGICAL CHALLENGES

A. Glicksman, *Planning, Phila Corporation for Aging, Philadelphia, Pennsylvania*

The study of older trauma survivors presents many challenges to be considered when undertaking a study in this area including: 1) identifying a person as a survivor; 2) avoiding retraumatization; 3) idealization of the survivor; 4) reinterpretation of past events by the survivor; 5) using the trauma experience as predictor of current status; 6) placing the trauma into an ideological framework; 7) issues of counter-transference 8) identifying the appropriate theoretical framework; and 9) what about aging perpetrators? Using examples from work with older persons who survived the Second World War either in the former Soviet Union or under Nazi occupation each issue will be described along with ways of dealing with these challenges. Special attention will be paid to how these issues could affect the interpretation of data collected in studies of older trauma survivors.

A TARGETED ADAPTATION (TAD) MODEL FOR ACHIEVING WELL-BEING IN THE FACE OF CANCER TRAUMA

E. Kahana¹, B. Kahana², *1. Sociology, Case Western Reserve, Cleveland, Ohio, 2. Cleveland State University, Cleveland, Ohio*

Life threatening illness and specifically, cancer, presents unique challenges to identity and social functioning during different phases of the lifecourse. Cancer symptoms and treatments pose highly stressful and often traumatic experiences to patients (Hewitt, Greenfield & Stovall, 2006). Effective coping efforts have been found to ameliorate adverse life effects of illness related trauma. However, the literature focused on the stress paradigm considers coping dispositions to be traitlike and does not target them to diverse adaptive tasks posed by illness related stressors. We propose a more differentiated model of Targeted Adaptation (TAD), that specifies each psychological and social domain where adaptation is needed. These include cognitive regulation, emotion regulation, social support regulation, proactive illness management, and social role management. Regulation denotes the purposive nature of these proactive adaptations and emphasizes mastery within situational constraints that older patients facing illness related trauma may achieve. We will discuss implications of the TAD model for non illness related traumatic experiences. We provide a portrayal of task-specific coping efforts in order to enhance the explanatory power of research seeking to understand the role of coping in diminishing the impact of trauma on quality of patients' lives.

THE ROLE OF FORMAL HEALTH CARE SERVICE RESOURCES AS A BUFFER AGAINST DEPRESSIVE SYMPTOMS IN POST-WAR LEBANON

M. Aydin, *UCLA Center for Health Policy Research, Los Angeles, California*

Little is known as to whether access to formal health care resources provides the same benefits to mental well-being as do informal social resources among older adults residing in post-trauma environments. This study examines the association between recent stress and depressive symptoms, and the role formal resources play in moderating this relationship. Data were obtained from the Elder Health Survey (AUB, 2003), utilizing N=490 (60+) Lebanese residing within three under-privileged Beirut communities. Multivariate analyses indicate that having access to medical care decreases depressive symptoms with each additional life stressor experienced. Interestingly, increased access to medical care exacerbates the psychological effects of specific negative events such as death and health decline, while limited access to medical care worsens the effects between violence-related events and depressive symptoms. Formal health care resources may or may not reduce the

impact of a negative event on depressive symptoms depending on the event's saliency.

SESSION 1000 (POSTER)

BODY COMPOSITION AND OUTCOMES

HOW DOES BODY WEIGHT CHANGE OVER TIME? MULTILEVEL MODELING OF BODY-MASS INDEX TRAJECTORY IN MIDDLE AND OLD AGE

A. Botosaneanu, J. Liang, *Health Management and Policy, University of Michigan, Ann Arbor, Michigan*

Background: Current knowledge concerning body-weight changes in middle and old age is largely based on cross-sectional studies. Longitudinal data available generally reflect short follow-up time without exploring the heterogeneity in the trajectory of body-mass index (BMI). Objective: To chart BMI trajectories over a period of 15 years in middle and late adulthood and to examine interpersonal variations in BMI trajectory in relation to socio-demographic characteristics and health conditions. Methods: Data came from 8 waves (1992-2006) of the Health and Retirement Study with a national sample of 13,545 Americans age 51 to 61 years old at baseline. Hierarchical linear modeling (HLM) with time-varying covariates was employed to examine interpersonal variations in intrapersonal differences in BMI. Results/Discussion: BMI increased over time in an approximately linear fashion. Initial BMI level was associated with education ($b=-0.11$, $p=.000$), race ($b=1.47$, $p=.000$), and age at baseline ($b=-0.02$, $p<.05$), but not with gender or Hispanic ethnicity. The rate-of-change in BMI was correlated with race ($b=-0.02$, $p<.05$), Hispanic ethnicity ($b=-0.03$, $p<.05$), and age at baseline ($b=-0.003$, $p=.000$). Significant differences in BMI intercept and slope were found between those who died and those alive at the end of the study (intercept: $b=0.38$, $p<.01$; slope: $b=0.06$, $p=.000$). Within-person variations in BMI were correlated with change in marital status ($b=0.2$, $p<.01$), heart disease ($b=0.32$, $p<.05$), smoking ($b=-0.009$, $p<.05$) and alcohol use ($b=-0.08$, $p<.01$). Research on the heterogeneity in the changes of body weight may facilitate the identification of groups and individuals targeted for health risk modification interventions in older ages.

THE IMPACT OF MID-LIFE OBESITY ON ACHIEVEMENT OF EXCEPTIONAL LONGEVITY

P.V. Targonski, C.R. Caldwell, A. Handlogten, L. Peterson, E. Tangalos, *Primary Care Internal Medicine, Mayo Clinic, Rochester, Minnesota*

Obesity is well-recognized as a risk factor for many acute and chronic threats to individual and public health in the 21st century. The impact of obesity on exceptional survival (ES) is not well-known, despite an increasingly aged population and increasing prevalence of obesity in the US. Utilizing the Mayo Clinic longitudinal records linkage system, we evaluated the association of body mass index (BMI) with achievement of ES (defined as reaching age 90 or older) in a historical birth cohort of Olmsted County, Minnesota residents born prior to 1911. 531 ES cases were matched by gender, birthyear, and a proxy of health-care access/utilization with controls who died at or near life expectancy (LE), defined as expected age at death for the study cohort (approximately 65 years). BMI was collected at, and 10 and 30 years prior to, the age at death of the control/case LE. Higher BMI was associated with increased odds of achieving ES at LE (OR=1.06, 95% CI = 1.00 – 1.12, $p=0.047$), which likely reflects acute weight loss among controls sampled in the peri-mortal period. However, higher BMIs at 10 and 30 years prior to achievement of LE (or death of control subjects) was associated with lower odds of reaching ES (OR= 0.96, 95% CI=0.91-1.00, $p=0.08$ and OR=0.91, 95% CI=0.86-0.97, $p=0.001$ for each unit increase in BMI >25). These data suggest that obesity is a strong inhibitor of ES and attention to weight control even at young adult and middle age is necessary if ES is to be achieved.

DECONDITIONING IN THE AGING ADULT: TRANSLATING THE SCIENCE FOR APPLICATION

L. Ehiemua-Pope, B.J. Holtzclaw, *University of Oklahoma HSC, College of Nursing, Donald W. Reynolds Center of Geriatric Nursing Excellence, Oklahoma City, Oklahoma*

Loss of the older adult's physical functioning impacts quality of life and the ability to live independently. Deconditioning is a significant factor contributing to loss of physical functioning cited in the literature, yet definitions and concerns differ across disciplines. Purpose: A systematic review of the literature was undertaken to determine factors related to the cause, progression, and abatement of deconditioning in older adults. A secondary purpose was to assess the present and potential state of interdisciplinary research of the phenomenon of deconditioning. Methods: Literature databases searched were Medline (Ovid), Cinahl (EBSCO), PubMed, and Cochrane (OVID), and included relevant research findings from physiology, cardiopulmonology, neuroscience, kinesiology, occupational therapy, gerontology, aerospace science, psychology, nutrition, biochemistry, clinical medicine, and nursing. Comparisons of disciplinary assumptions, perspectives, and cross-disciplinary interpretations of physical deconditioning were made. Related concepts, such as frailty, sarcopenia, and disuse myopathy, were examined for relevance to an interdisciplinary care approach. Descriptive and intervention studies were included. Research evidence was evaluated for design and sampling adequacy, clear description, ease and validity of measurement, conceptual congruence for use with other measurements. Findings: Lack of agreement between discipline-specific definitions of deconditioning were found, although nearly all accepted studies offered clear rationale and possibilities for translation into assessment and care of the older adult. Possibilities for interdisciplinary research in this area are apparent.

SESSION 1005 (PAPER)

DEMENTIA - HS PAPER SESSION

MEASURING CORTISOL AND DETERMINING HYPOTHALAMIC-PITUITARY-ADRENAL (HPA) AXIS REGULATION AND DYSREGULATION IN PEOPLE WITH DEMENTIA

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Assessing cortisol levels of people with dementia has the potential to contribute to a better understanding of stress and underlying mechanisms associated with negative outcomes. The purpose of this study was to test the feasibility of saliva collection to measure endogenous cortisol in nursing home residents with advanced dementia and describe alterations in hypothalamic-pituitary-adrenal (HPA) axis function. Eighty three people with an average age of 87.54 (SD=6.74) and average Mini Mental Status Exam Score of 7.3 (SD = 6.3) participated. Ninety-three percent (N = 616) of the samples were able to be collected and were of sufficient quantity for assay. Analysis of data using our algorithm revealed that 14% (n = 11) showed the normal adult pattern, half (54% n = 42) demonstrated an increase in the evening cortisol levels, while the remaining profiles were flat (32%, n = 25), suggesting HPA dysregulation. These data suggest the feasibility of salivary cortisol collection and analyses to obtain cortisol rhythm in a population of nursing home residents with dementia who are difficult to study. The dysregulated and flattened cortisol profiles may be an indication of sleep disruption increased agitated behavior, or impending acute illness. As such, assaying salivary cortisol and the resulting cortisol profiles may provide insight into identifying and intervening early with those individuals most at risk for developing these clinical conditions. As such, assaying salivary cortisol and the resulting cortisol profiles may provide

insight into identifying and intervening early with those individuals most at risk for developing these clinical conditions.

EMPIRICAL DERIVATION AND VALIDATION OF A WANDERING TYPOLOGY

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Problem: Although several wandering typologies have been published, only one has been empirically derived, based on the geographic pattern of individual wandering episodes. Our goal was to develop and validate a wandering typology based on differences in frequency, duration, and temporal distribution of wandering at the person level. Methods: Using a cross-sectional, correlational descriptive design in 22 NH and 6 ALF, we studied 142 residents with dementia who spoke English, met DSM-IV criteria for dementia, scored <24 on the mini-mental status exam (MMSE), were ambulatory (with or without assistive device), and maintained a stable regime of psychotropic medications. Data on wandering were collected by direct observations, plotted serially by rate and duration to yield 21 parameters; and reduced through factor analysis to four components: high rate, high duration, low/moderate rate and duration, and time of day. Other measures included the Minimum Data Set 2.0 mobility items, Cumulative Illness Rating Scale – Geriatric, and aural body temperature readings to determine parameters of circadian rhythm. Results: Cluster analysis revealed three distinct groups of wanderers: classic, moderate, and subclinical. MMSE, mobility, and heart and upper and lower GI problems differentiated among groups of wanderers and in comparison to non-wanderers, with classic wanderers having the highest rate and duration, the best mobility, the greatest cognitive impairment, and the poorest health. Neither time of acrophase nor amplitude of circadian rhythm differentiated groups. Conclusion: Results have implications for improving identification of wanderers and treatment of possible contributing factors.

MORNING CORTISOL AND BEHAVIORAL SYMPTOMS OF NURSING HOME RESIDENTS WITH DEMENTIA

L. Woods, H. Kim, M. Yefimova, *UCLA, School of Nursing, Los Angeles, California*

Behavioral symptoms of dementia (BSD) are a significant challenge for elders and their caregivers, with a prevalence ranging between 66% and 98%. While several studies have examined BSD type and frequency, few studies have examined the contribution of a hypothalamic-pituitary-adrenal axis dysregulation to BSD. The purpose of this study was to examine the relationship between morning cortisol and BSD in nursing home (NH) residents with dementia. Method. A within subject longitudinal design was used. Saliva was collected four times daily for 5 days to obtain a diurnal rhythm from thirty NH residents, aged 80 – 102. Behavior was observed every 20 minutes for 12 hours/day for five days. Mixed model analysis was used to test the association between morning cortisol and BSD. Participants were divided into two groups, low and high morning cortisol. The mean and standard deviation for total behavior and median morning cortisol (µg/dl) was used as a cut point for group division. Results indicated a significant inverse association between mean overall BSD and morning cortisol (F = 12.71, p=.000) in addition to a significant inverse association between low and high morning cortisol and behavior variability which also increased with time (F = 15.36, p=.000). Low or high morning cortisol had a significant effect on the association between two prevalent co-occurring behaviors, vocalization and restlessness (F = 19.59, p = 0.000). Conclusion. While preliminary, these results suggest a relationship between morning cortisol and BSD. Low morning cortisol, indicating HPA axis dysregulation, increases vulnerability to increased BSD.

CHARACTERISTICS OF WHEELCHAIR LOCOMOTION IN MALE VETERANS WITH DEMENTIA: IS IT WHEELCHAIR WANDERING?

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Wandering is a common and potentially dangerous behavior that may expose persons with dementia to elopement, getting lost and death and has generally been considered bipedal. However recent empirical data suggests that wandering locomotion occurs by other modes such as assisted by wheelchair. The purposes of this focus group study were to: 1) describe locomotion assisted by wheelchair in persons with dementia and 2) compare characteristics of dementia-related assisted by wheelchair locomotion to empirically validated characteristics of bipedal wandering for conceptual clarity. Data from four focus groups undertaken with three types of direct care staff (RNs, CNAs, LPNs) in two Veteran's Administration nursing homes in Florida yielded descriptions of a wheelchair-assisted phenomenon consistently described as 'wandering' by participants. Data suggests that wheelchair assisted locomotor behavior parallels empirically-defined bipedal wandering in perceived causality, temporal distribution, resident profile and behavioral outcomes. However it diverges from bipedal wandering because it requires different physical dynamics and involves the presence of rapid and efficient travel to a planned destination. Further, a high incidence of patient and staff injury was reported in conjunction with staff attempts to curtail potentially dangerous aspects of wheelchair locomotion. Results suggest that, while wheelchair locomotion in male veterans with dementia shares some characteristics of bipedal wandering, there are other features of the behavior that are arguably unique to it. Further investigation is required to explicate the behavioral correlates of wheelchair locomotion which may extend knowledge of wandering and have important theoretical and management implications.

SESSION 1010 (PAPER)

EPIDEMIOLOGY

THE USE OF PSA TEST AMONG MEN AGED 75 YEARS AND OLDER IN THE UNITED STATES: FINDINGS FROM THE 2006 BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM DATA

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Background: Prostate cancer is the most frequently diagnosed non-skin cancer. In 2002, U.S. Preventive Services Task Force (USPSTF) concluded that there was insufficient evidence to advocate for or against routine prostate cancer screening using prostate specific antigen (PSA) testing. Last August, USPSTF updated this guideline and recommended against screening for prostate cancer in men aged ≥ 75 years because potential harms outweighed potential benefits. Objective: To describe the prevalence of PSA testing for American men aged ≥ 75 years and identify potential factors that correlate with the use of PSA test. Methods: We used 2006 BRFSS data to estimate the prevalence of PSA testing within the past year. We conducted bivariate and multiple logistic regression analyses using SAS/SUDAAN software. Results: Overall 60% of men aged ≥ 75 years reported having a PSA test within the past year. Men who had health insurance, were satisfied with life, or always had emotional support were more likely to report having had a PSA test ($p < .05$). However, men who were ≥ 81 years, never married, or had less than high school education were less likely to report having had a PSA test ($p < .05$). Conclusions: In 2006, a large proportion of men in the U.S. aged ≥ 75 years reported having PSA testing. Certain social, demographic and psychosocial factors were associated with receipt of PSA testing. This study not only provides baseline data to evaluate future acceptance/implementation of the new USPSTF screening guideline,

but helps to inform the development of educational materials and interventions for this population.

PROBIOTICS TO COMBAT IMMUNOSENESCENCE: A SYSTEMATIC REVIEW OF THE LITERATURE

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Background: Age-related impairment of the immune system, known as immunosenescence, leaves the elderly population at increased risk for infection. Methods: A systematic review of the literature, using multiple computerized databases using the search terms "probiotics AND elderly." Inclusion criteria: elderly population, clinical trial, either a serum immunologic outcome or an infection related outcome. Results: 8 studies met criteria including 4 randomized, controlled-trials, 3 pre-/post-intervention trials, and 1 randomized, uncontrolled trial. The probiotic organisms studied were *Lactobacillus rhamnosus* HN001, *L. johnsonii* La1, *L. casei* DN-114 001, *Bifidobacterium longus* 2C and 46, and *B. lactis* HN019. *B. lactis* and *L. rhamnosus* both demonstrated significant increases in natural killer (NK) cell (3 studies), neutrophil (4 studies) and monocyte (3 studies) functioning. No significant results were found regarding modulation of specific cytokine levels after treatment with probiotics (2 studies; *B. longus*, *B. lactis*, and *L. johnsonii* evaluated). 1 study demonstrated significant increases in total, CD4+, and CD25+ T-cells counts (*B. lactis*), and 2 studies showed increased number of NK cells (*B. lactis*, *L. rhamnosus*). 2 randomized trials showed decreased duration but not incidence of infections compared to control or placebo (*L. johnsonii*, *L. casei*). No adverse events were reported in any study. Conclusions: The heterogeneity of the studies precluded the use of meta-analysis. Overall, the results of this review suggest that certain probiotic organisms have immunostimulatory effects and can be safely used in the elderly. Additional randomized, placebo-controlled trials are needed to study strain-specific effects including relevant clinical outcomes.

SLEEP DIFFICULTY AND MORTALITY IN A COHORT OF OLDER ADULTS WITH 27 YEARS OF FOLLOW-UP

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Complaints regarding sleep are common among older individuals. While several papers have shown a relationship between short and long duration of sleep and metabolic outcomes and related mortality, few analyses have examined the relationships between other qualities of sleep and subsequent outcomes. The objectives of this paper are to examine the relationships between mortality and difficulty with the following aspects of sleep: going to sleep, waking at night, waking too early, napping, and waking not feeling rested. This paper utilized the Iowa cohort of the Established Populations for the Epidemiologic Study of the Elderly, a group of adults aged 65 and older at baseline who were followed-up for 27 years ($n = 2787$). Results suggest that those who frequently napped or woke not rested at baseline had earlier mortality within 10 years of follow-up (age and sex adjusted HRs: 1.18 and 1.26, respectively). However, inclusion of limitations of activities attenuates these relationships (fully adjusted HRs: 1.04 and 1.07). For mortality after 10 years of follow-up, napping did not predict mortality. Waking not rested sometimes or frequently were associated with increased mortality (age and sex adjusted HRs: 1.21 and 1.45), but the associations were attenuated in the fully-adjusted model. Other sleep characteristics were not associated with mortality. Napping and waking not rested may be related to the severity of underlying disease processes that both directly relate to mortality and indirectly through increased fatigue and strain with daily activities. Further analysis is needed to clarify the timing difference for these two risk factors.

CHRONIC CONDITIONS FROM THE LINKED DATA: INCIDENCES, PREVALENCE, AND AGE AT DIAGNOSIS (NHEFS, MEDICARE CLAIMS)

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As a result of the demographic transition and improved detection, secondary prevention, and treatment of chronic conditions such as heart disease, cancer, and diabetes, the number of older persons living with chronic conditions has increased significantly. About 83 percent of Medicare beneficiaries have at least one chronic condition. The National Center for Health Statistics linked data from the National Health and Nutrition Examination Survey, 1971-1975 (NHANES I), the NHANES I Epidemiologic Follow-up Study (NHEFS), and claim data from CMS allowed us to determine incidences, prevalence, and age at diagnosis for major chronic conditions for more than 4,800 study participants. To determine the time of diagnosis, we used the NHANES I and NHEFS questionnaires, NHEFS medical facility stay records, and our adaptation of the Chronic Condition Warehouse algorithm, developed by the CMS. This algorithm allows extracting claim records related to 21 chronic conditions. Our preliminary findings show that during the study period 1971-2000 among participants who were born in 1935 or earlier, 25 percent developed diabetes, 53 percent developed ischemic heart disease, 18 percent developed dementia, 31 percent developed chronic obstructive pulmonary disease or emphysema, and 60 percent developed arthritis. Using data from the NHANES I interview, we determined effects of smoking, BMI status, and other risk factors over 30 years, from baseline to the time of the onset of chronic conditions. The limitations and benefits of using linked data from the interviews, medical records, and administrative claims will be discussed.

ADMINISTRATIVE DATA ALLOW PROGNOSTIC STRATIFICATION OF OLDER PATIENTS IN THE EMERGENCY DEPARTMENT

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Aim. To evaluate whether administrative data allow initial prognostic stratification of older patients accessing Emergency Departments (ED). **Methods.** From discharge records of 10,913 patients aged 75+ years, admitted to ED of hospitals in Florence, Italy in 2005, information on demographics, previous drug treatment, hospital admissions and discharge diagnoses was retrieved, to develop a 1-year mortality prognostic index. Further, we compared survival of patients admitted to a Geriatrics or an Internal Medicine ward, after stratification by the prognostic index. **Results:** Patients who scored 4-6, 7-10 and 11+, compared to those who scored <4, had hazard ratios (95% confidence interval) for 1-year mortality of 1.5 (1.3-1.7), 2.2 (1.9-2.6), and 3.0 (2.6-3.4). Patients in the worse prognostic stratum experienced a 33% lower mortality when admitted to a Geriatrics ward. **Conclusion.** Simple administrative data predict long-term survival in older patients hospitalized via ED. Patients with a worse prognosis benefit from admission to Geriatrics wards.

SESSION 1015 (PAPER)

FALL PREVENTION

DOES CONSCIENTIOUSNESS PROTECT AGAINST RECURRING FALLS IN OLDER MEN?

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Background: Older men may fall as often as older women who generally have more functional limitations because they engage in more riskier activities, such as climbing on ladders and taking out the garbage under icy conditions. Since the trait of conscientiousness is associated with more accident control behaviors and less risk-taking in traffic, high conscientiousness may protect older men from falling. **Methods:** We examined the association between conscientiousness and incident recurrent fall risk in 419 men enrolled in the Cognitive Vitality Substudy of the Health, Aging and Body Composition Study (mean age=75.4 years). Conscientiousness was assessed using the NEO-FFI and men were subsequently followed prospectively over 2 years. Recurrent fallers (fell 2+ times in 2 years) were identified by self-reported number of falls every year for two years. Odds Ratios (OR) were estimated from multivariate logistic regression models adjusted for age, race, study site, education, and executive function. **Results:** The mean (SD) conscientiousness score was 33.6 (5.5) and 16.5% (N=69) of men fell at least twice over the 2 year study. In the multivariate model, a 2SD increase (defined as ± 1 SD of mean) in Conscientiousness score was associated with a 44% lower odds of recurrent falls (OR=0.56, 95% CI:0.33-0.95). **Conclusion:** Conscientiousness in men is associated with low risk for recurrent falls, perhaps because more conscientious men take more care while performing riskier displacing activities or just engage in those activities less often. Findings have important implications for identifying men at high risk for recurrent falls and fall prevention.

THE EFFECTIVENESS OF THERAPEUTIC YOGA ON THE RISK OF FALLING IN OLDER ADULTS: A PILOT STUDY

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Purpose: An estimated 3.7 million adults over the age of 65 experience one fall each year. Therapeutic exercise reduces the risk of falling. The purpose of this study was to assess the effects of a therapeutic yoga program on the risk of falling. **Subjects:** There were 8 female research subjects (mean age = 84) and eight control subjects (6 female, 2 male, mean age = 81.3). **Methods:** Subjects signed an informed consent and were screened using the MMSE. Pre-test evaluation consisted of: Timed up and Go, Berg balance scale, gait speed (preferred and fast), four square step test and floor to stand transfer. Research subjects participated in an 8 week yoga program (90 minutes, twice weekly). Control subjects received no intervention. **Results:** All subjects attended at least 10 of the 16 classes (62% attendance). Post-test paired t-tests revealed the following: Yoga participants: BERG balance scale ($t = 4.51$, $p = .0003$) and fast gait speed ($t = 2.69$, $p = .031$). In addition, timed floor to stand approached significance ($t = 1.20$, $p = .086$). No other significant changes were noted. **Conclusions:** Improvements in the Berg balance scale and fast gait speed indicate that research subjects have a decreased risk of falling. In a well designed yoga program subjects perform activities standing, sitting and lying on the floor. Therefore, subjects perform many activities that improve mobility and reduce the risk of falling.

IMPROVING SAFETY CULTURE ONE FALL AT THE TIME

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This study combines the concept of safety culture and a method for investigating adverse events in health care called Systemic Falls Investigative Method (SFIM). Guided by High Reliability Organization Theory, safety culture is defined as shared perceptions and beliefs about safety, and is embraced by high reliability organizations such as aviation. SFIM is an innovative and comprehensive method of identifying organizational and personal causes and contributors to falls in health care. It reveals latent safety deficiencies that can guide immediate targeted interventions. Previous studies determined that hospitals and long term care facilities (LTC) were not ready for the integration of investigative findings and implementation of strategies that will facilitate removal of causes of falls. The purpose of this study was to investigate the potential of SFIM implementation to contribute to the improvements of safety culture in organizations providing care to older adults. We conducted a comprehensive literature review to identify best practices for risk management in health care, focusing on elements of safety culture and the creation of safety teams. Staff and administrators from selected units in two hospitals and one LTC, were surveyed using the Patient Safety Culture in Healthcare Organizations Survey, prior to implementation of the SFIM. Two SFIM investigators from each site were trained and monitored while conducting falls investigations. Pre- and post-intervention interviews and focus groups identified facilitators and barriers to safety culture change associated with patient falls. Results show promising potential of SFIM to contribute to improvements of safety culture throughout the organization.

FALLS AND ASSISTIVE DEVICE USE: NOVEL FALL PREVENTION STRATEGIES

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Significance: Falls are well documented as a major reason for morbidity, loss of independence and need for long term care among older adults. Ample literature exists on fall prevalence, contributing factors, and preventative measures but little on the benefits of canes/walkers, or use at time of falls. Increased understanding of patterns of device use and reasons for non-use have important implications for clinical education and care, as well as design considerations for new assistive devices. Hypothesis: When people fall in their own homes, they do not have their device with them or it is not easily accessible. Methods: The study involves two parts: development of a technology assisted cane/walker and a survey of people age 60 plus with a history of falling who use a cane or walker. A survey is currently being distributed to 1000 eligible subjects, focusing on fall risk and history, patterns of assistive device use, and reasons for non-use. An abbreviated version of the survey was recently piloted with a sample of older adults. Results: Preliminary survey revealed that 94% of respondents had fallen within the last year, 75% had prescribed assistive devices, only half of these used their devices all of the time. Of specific interest was that the assistive devices were not consistently used in their own residence, where the falls took place. Reasons for non-use were identified as well as device features that respondents felt would increase use. These findings support the need for device development and educational interventions to reduce falls.

SESSION 1020 (POSTER)

FALLS - HS POSTER SESSION

EFFECTS OF GUIDED RELAXATION AND EXERCISE IMAGERY ON OLDER ADULTS WITH A FEAR OF FALLING

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Fear of falling (FOF), a major health care concern, contributes to a decreased quality of life. Our study examined a 6-week intervention using Guided Relaxation and Exercise Imagery (GREI) to reduce FOF in community dwelling older adults. 184 primarily African American and Asian adults (mean age = 73.2 yrs) were assessed using functional performance (TUG, SLS) and FOF measures (1QFOF, short FES-I, ABC). Subjects were then divided into 4 groups based on their FOF response: 2 placebo control groups (FOF-PC; NoFOF-PC) and 2 intervention groups (FOF-I; NoFOF-I). The intervention groups received an audio CD containing a GREI program. The control group received an audio CD containing two relaxation tracks and music. Duration of each program was 10 minutes, 2 times per week for 6 weeks. Compared to the FOF-PC group, the FOF-I group significantly reduced FOF (78% vs. 20%). Significant increases in exercise imagery rates, efficacy in falls related activities, and perceived exercise levels, and decreased TUG times occurred in FOF-I and FOF-PC. Reduced FOF-PC may be due in part to the relaxation component associated with these groups. This is the first study documenting the effectiveness of 6-weeks of GREI to reduce FOF and increase falls-related efficacy, exercise imagery, and perceived exercise levels. An advantage of GREI is that it can be used anywhere, anytime, and no physical skills are required. Further exploration of GREI on psychological variables related to fear of falling and falls may substantiate its effectiveness as a fear of falling intervention.

ASSOCIATION BETWEEN PULMONARY FUNCTION AND RISK OF RECURRENT FALLS WAS MEDIATED BY MUSCLE STRENGTH

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Decreased muscle strength has been found in patients with impaired pulmonary function. It is unclear whether the effect of pulmonary function on muscle strength leads to higher risk of falls, especially before impaired pulmonary function is clinically diagnosed. A total of 1,925 participants (average age: 73.5 years old; 52% female; 39% black) from the Health, Aging, and Body Composition study with a valid pulmonary function test (PFT) at baseline, and free of chronic obstructive pulmonary disease and airflow obstruction were included. PFT was measured using spirometry, and muscle strength at upper and lower extremities was measured using a hand-held dynamometer and a Kin-Com dynamometer. Generalized estimating equation was used to evaluate the effect of PFT on risk of recurrent (≥ 2) falls. After 8 years of follow-up, recurrent falls occurred in 583 participants. Lower forced expiratory volume in 1 second (FEV1) and forced vital capacity (FVC) were significantly associated with higher risk of recurrent falls after adjusting for age, race, gender, site, BMI, smoking history, physical activity, Parkinson's disease, emphysema, chronic bronchitis, asthma, and use of pulmonary medication (both $p < 0.04$). Every standard deviation decrease in FEV1 (SD=0.61) and FVC (SD=0.79) was associated with a 17% (95%CI: 1-36%) and 20% (95%CI: 2-41%) higher risk of recurrent falls, respectively. However, this significant inverse association disappeared when muscle strength was adjusted (FEV1: OR=1.06(0.90-1.26); FVC: OR=1.08(0.90-1.30)). Our findings suggest that weak pulmonary function may increase the risk of recurrent falls through decreased muscle

strength, and its effect may occur before clinical diagnosis of obstructive pulmonary function.

FALL RISK IN THE OLDER ADULT WITH DIABETES: A REVIEW

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PURPOSE The purposes of this literature synthesis is to integrate research investigating falls associated with diabetes medications, glycemic control, or hypoglycemia in older adults who fall. A common rationale for less stringent glycemic control in older adults is fall risk, but the evidence-base is unclear. **BACKGROUND** Management of diabetes mellitus (DM) in the geriatric patient has unique challenges, complicated by clinical and functional heterogeneity. Older adults with diabetes have histories ranging from recent diagnosis to long-standing disease, influencing the effects of microvascular and macrovascular complications. Diabetes is progressive and will often coexist with other chronic conditions. There is no published research substantiating the practice of changing glycemic targets for individuals related to the dependent variable of fall status. Currently there are few data examining diabetes medication use, glycemic control, or hypoglycemia in older adults who fall. **METHODS** The review included search of the electronic databases PubMed, CINAHL, Google Scholar, and Ageline with no date limits. Keywords integrated in the search were aged, DM, diabetes management, falls, medication, insulin, glycemic control, glucose, A1C, hypoglycemia, and frailty. Included articles were research studies in peer-reviewed journals published in the English language. Excluded were dissertations, unpublished studies, reviews, position papers, or abstracts. **RESULTS** There is conflicting data among researchers correlating falls risk to diabetes medications or glycemic control. There is no evidence supporting hypoglycemia being a risk factor for falling, however the data is sparse. **IMPLICATIONS** There is a narrow body of literature available, and virtually no reports of well-controlled, well-sampled studies that provide an evidence base for clinician decision-making. Additionally, conflicting data among researchers add to the confusion in treating geriatric patients with diabetes. The topic warrants further research investigation.

THE MEDIATING ROLE OF HEALTH DIMENSIONS ON VISION IN PREDICTING FALLS IN OLDER PEOPLE

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This study examined contributions of health dimensions that could mediate vision in affecting limb functioning, and predicting falls in older adults. Based on Nagi's model of disability, this study considered four main stages progressing from (1) risk factors, through (2) pathology/impairments, resulting in (3) functional loss, and eventually, (4) disability. Poorer health outcomes are assumed to result when declining visual functioning leads to greater disability—for example, older people with poor vision may be more likely to limit activity-levels or eat poorer diets due to difficulties performing ADLs/IADLs, compared to peers with normal vision. In turn, disability could lead to new risk factors, which play out as new pathology/impairments and result in increased/new functional losses. Such iterative cycling could explain relationships between seemingly unassociated systems, like vision and the musculoskeletal system. Data from 2004 and 2006 waves of the Health and Retirement Study were analyzed, using participants who were 70 years or older in 2004. Path analyses were conducted using AMOS to link variables representing each stage of the disability process. Results support a mediated relationship between vision and falls. Poor vision was statistically associated with greater disability; which was associated with the risk factor, body mass index; BMI was associated with an aggregate measure of pathology/impairment, which predicted limb functioning. Finally, limb functioning was statistically associated with falls. Implications for exercise programs designed for older people with visual impairments are discussed. Notably, the study highlights

unique circumstances of this group, in maintaining adequate limb functioning through physical activity.

FEAR OF FALLING AMONG OLDER WALKER USERS: A CROSS-SECTIONAL STUDY

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Background. Fear of falling is considered a risk factor for falls. Walkers are commonly used by older adults for enhancing mobility. **Aim.** To investigate the level of fear of falling in terms of the Falls Efficacy Scale, how that level is associated with fall frequency, and how walkers were used among older walker users. **Method.** Forty-two qualified older adults completed the Falls Efficacy Scale and a questionnaire concerning walker use and history of falls in the last 12 months. Their walkers were assessed for appropriate use and maintenance. **Results.** Fifteen subjects (36%) fell at least once after beginning to use a walker in last 12 months, but the number of falls did not correlate to the duration of walker use. A moderate positive correlation existed between Falls Efficacy Scale scores and number of falls. Assessments of walkers showed that the most common misuse was lack of medical consultation in obtaining a walker, followed by incorrect walker height, poor posture during ambulation. Frequency of the posture problem is significantly different between the fallers and the non-fallers. **Conclusions.** Walker users who fall tend to have a higher fear of falling and to have poor posture during ambulation. This poor posture may result from individual or combined effect of lack of medical consultation and incorrect walker height. Clinicians including nurses and therapists should possess knowledge to instruct older adults on appropriate walker use and thereby reduce risk of falling.

MULTIDIMENSIONAL RISK ASSESSMENT TOOLS FOR FALLS: A SYSTEMIC REVIEW

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A quick, valid and effective fall risk screening tool is essential for preventing falls. There are many existing assessment tools for identifying fall risks, not all of them have adequate psychometric properties or feasibility for use in various settings. Clinicians must be informed in order to choose an appropriate assessment tool. The purpose of this paper is to analyze existing multidimensional fall risk assessment tools to enable more informed choices for nursing staff. **Method:** CINAHL and Pub Med databases were searched using “falls” and “assessment tools” as the key words. The search yielded fourteen articles developing and fifteen re-testing multidimensional risk assessment tools. Studies focused on developing or re-testing a falls screening tool were selected. Only the studies reporting psychometric properties were included. Major review and analysis focused on the validity, feasibility and effectiveness of the current existing tools. **Results:** History of falls, impaired mobility and mental dysfunction were the most common intrinsic risk factors. No tool included environmental risk factors. Twelve tools were developed within hospitals and two within community settings. Only the Fall Risk Assessment Tool and St. Thomas's Risk Assessment Tool in Falling Elderly Inpatients (STRATIFY) had acceptable psychometric properties. The feasibility and effectiveness of those screening tools were under- tested. Limitations from research designs impairs the generalizability of those tools. **Conclusion:** While additional research is needed to test current tools in various settings, Fall Risk Assessment Tool and STRATIFY are recommended for assessing falls in hospital settings. Tropm's tool is tentatively recommended for community-dwelling settings.

NURSE CHAMPION MODEL TO REDUCE FALLS AND RELATED INJURIES IN NH RESIDENTS IN A LARGE TEACHING NURSING HOME

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Beginning with a small state-sponsored grant, the MJHH, a 500-bed teaching nursing home in south Florida, developed a dynamic, comprehensive falls prevention strategy employing a nurse champion for support, guidance, and critique of falls risk assessments, incident reporting, and care planning. In 2007 fall incidents reports were analyzed, and in 2008 a new facility-wide strategy was implemented. **METHODS:** The model comprises a restorative nurse in charge of program implementation and monitoring; advanced technology such as bed and chair sensor alarms; extensive use of low beds (30% of residents); universal preadmission falls risk analysis; PT evaluation of all residents and restorative nurse assessments after each fall with suggested care plan modifications; weekly progress review by the fall IDT; ongoing fall prevention and management training for all nursing levels; rigorous medication review; daily meeting on the previous day's falls; additional trained CNAs dedicated to fall prevention in busy areas with high falls rate (e.g., dining rooms). **RESULTS:** Using chi-square analysis, we compared data for 12 months before (2007) and 12 months after (2008) the model was implemented. In 2007 there were 826 falls per 160,600 bed days. After intervention falls for this same population declined to 621 [$p < .001$, CI (3.57, 4.18)]. The number of emergency visits and hospitalization for fractures decreased; fracture incidence

SESSION 1025 (SYMPOSIUM)

GERONTOLOGIC BIOSTATISTICS AND THE NEW GERONTOLOGIC RESEARCH ALGORITHMS & STATISTICAL PROGRAMS WEBSITE

Chair: *H. Allore, Internal Medicine, Yale University, New Haven, Connecticut*

Discussant: *R. Jones, Harvard University, Boston, Massachusetts*

Multifactorial etiologies of geriatric health syndromes and multiple morbidities of older patients present challenges for designing and analyzing research studies. This symposium highlights a set of statistical issues that, while not unique to gerontologic research, constitutes a distinctive ensemble worthy of deliberate and systematic attention, e.g. addressing issues of missing data, multiple and correlated outcomes and predictors, analysis of complex longitudinal data sets, disease of later life with genetic components, and multi-component intervention designs. We provide practical advice on ways to control the overall error rate in multiple outcomes studies, consider various methods for missing data including impacts of ignoring 'missingness' and imputation strategies for repeated measures and survival analysis. Furthermore, genetic resources for exploring conditions that have later life onset with potential genetic contributions are demonstrated. The symposium includes a discussion of a new website Gerontologic Research Algorithms & Statistical Programs (GRASP) that is a resource for those involved in analysis of gerontologic research. GRASP provides sample programs, data structures, articles and links to resources, such as the Geriatric Research Instrument Library (GRIL). GRIL is an online repository of data collection instruments in geriatrics research. For each instrument GRIL includes a description, references, and links to online resources, and many entries provide downloadable PDF documents. GRASP was created by the joint efforts of Yale, Duke and Wake Forest Universities Older Americans Independence Centers with funding from the NIA. This symposium will present a rich set of gerontologic resources and highlight this exciting and expanding methodological field.

CENSORING AND DEATH AS FACTORS IN THE ANALYSIS OF GERONTOLOGIC DATA

C.F. Pieper, M. Kuchibhatla, L.R. Landerman, *Duke University Medical Center, Durham, North Carolina*

Missing values, due to dropout, death, and inability, are ubiquitous in studies of the elderly, both in long term epidemiologic studies and shorter termed clinical trials. Missing values rarely meet the assumption of Missing at Random. Typically, bias results from failure to consider missingness, while increased standard errors for estimates typically results from imputation. Using examples from several large panel studies of the elderly, we will present the impact of ignoring 'missingness' on the results and various strategies for dealing with missing values in repeated measures and survival analysis: (1) the impact of incorporating death and censoring in a repeated measures format in the EPESE (Established Populations for the Epidemiologic Study of the Elderly), and, (2) in survival analysis, the impact of informative censoring on disease-free survival in the Cache County Memory Study (CCMS). Finally, the methods housed in GRASP useful in dealing with missing value issues will be shown.

GRASP- A TRAINING MANUAL FOR STATISTICAL ANALYSIS OF GENETIC DATA

E. Hauser, C. Haynes, S. Nelson, E. Rusnak, *Center for Human Genetics, Duke University, Durham, North Carolina*

The identification of genetic contributions to disease is an important focus of aging research. While incorporating the same challenges faced by general statistical methods in the analysis of aging data, genetic analysis itself brings its own challenges. Over the past 20 years, the Duke Center for Human Genetics (CHG) has developed a comprehensive set of statistical analysis procedures for the analysis of genetic data. These include old and new methods as they are developed along with novel statistical genetics methods developed by researchers at the CHG. We have catalogued these methods along with tools, procedures and tutorials on a common website to introduce these methods to researchers new to genetic analysis as well as to provide standard operating procedures for ongoing studies. These materials, previously not generally available, are now incorporated into the GRASP website. We will introduce general genetic methods and demonstrate features of the genetics training manual.

SOME CONSIDERATION ON MULTIPLE OUTCOMES IN AGING RESEARCH CLINICAL TRIAL DESIGN

X. Leng, *Department of Biostatistical Sciences, Wake Forest University School of Medicine, Winston Salem, North Carolina*

When multiple outcomes are obtained from aging research clinical trials, a predefined error rate such as Family Error Rate (FER) in the strong sense is desired to control false positive rate. Bonferroni method controls FER in the strong sense and is easy to apply. However it has been blamed being too conservative when outcomes are correlated. We studied how this "conservativeness" has impact on power and sample size consideration for multivariate normal outcomes in a two-arm clinical trial design. These results can easily be extended to more than two treatment group design and analysis of covariance.

AN EVALUATION OF THE DESIGN AND LAYOUT OF THE GRASP WEBSITE

G. Demiris, *University of Washington, Seattle, Washington*

The database-driven GRASP website is based on conventional open-source technologies. The user-interface is driven by twin aims – library and community. Through the extensive use of client-side programming, and Asynchronous JavaScript and XML (AJAX) functions to selectively refresh content, the need for frequent full-screen refreshes are eliminated, and the interface has the feel of a local PC application. The StatLib website hosted by Carnegie Mellon University is a comprehensive resource of statistical materials; Pennsylvania State University and

UCLA have relevant methodology cores with website access. GRASP differs from these resources because it has a more narrowly-defined targeted audience, namely professional biostatisticians and epidemiologists working in gerontologic research. Content can be organized in a way that makes navigation simpler and more intuitive than more general websites. This presentation will evaluate the extent to which GRASP has the potential of becoming a nexus for an online community of workers in this field.

SESSION 1030 (POSTER)

HEALTH RISK BEHAVIORS

ANTHEM OR SWAN SONG? AGING BABY BOOMERS AND ILLICIT DRUG USE

D.B. Bradley¹, D.F. Duncan², T. Nicholson¹, J. White¹, J. Bonaguro¹, 1. *Center for Gerontology, Western Kentucky University, Bowling Green, Kentucky*, 2. *Duncan & Associates, Bowling Green, Kentucky*

While the anthem “sex, drugs and rock and roll” might have resonated with members of the baby boom cohort as teenagers, it is generally believed that substance abuse is not a problem among aging baby boomers. Recognition that alcoholism occurred in the elderly often enough to be a public health problem came only in the last quarter of the 20th Century. This new awareness accompanied a general view that older adults might abuse alcohol or prescribed drugs but not illegal drugs. To test this view, we examined admissions of persons 55 years of age and older ($n = 918,955$) in the Treatment Episode Data Set (TEDS). The TEDS is an administrative data system providing descriptive information about the national flow of admissions to providers of substance abuse treatment. TEDS is one of the three components of SAMHSA’s Drug and Alcohol Services Information System. The proportion of individuals admitted for alcohol abuse declined from 81.7% (1992) to 51.6% (2006). The proportion of individuals admitted for other drug use increased from 7.6% to 23.2% over the same period. Similarly, the proportion of persons admitted for alcohol plus other drug use increased from 7.9% to 23.1%. Given the historically high levels of drug use among this generation there should be an impact on admissions of older persons to substance abuse treatment programs. We conclude by suggesting changes in policy that take into account the possible abuse of illicit drugs as the “baby boomers” reach retirement age.

SESSION 1035 (SYMPOSIUM)

HEALTH-RELATED QUALITY OF LIFE ISSUES CONFRONTING AGING OLDER ADULTS

Chair: S.Y. Hawkins, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

Discussant: C. Shawler, *University of Louisville, Louisville, Kentucky*

Health-related quality of life (HRQOL) assessment has become a universally accepted part of health care research. HRQOL is a multidimensional concept that is defined as the “optimum levels of mental, physical, role, and social functioning including relationships and perceptions of health, life satisfaction, and well-being”. Cognitive function, productivity and intimacy, and symptoms of critical importance to life quality such as pain, sleep disturbances, and depression are often included in definitions of HRQOL. Measures of HRQOL can be classified into two types, those designed to assess HRQOL among a specific patient population such as older adults, or those designed for specific diseases or health-related conditions such as urinary incontinence. Conducting nursing research on HRQOL can provide knowledge and methods that will potentially improve the lives of older adults. The purpose of this symposium is to explore HRQOL research conducted with older adult populations with selected physical, psychological, and/or sociological challenges. Two presenters in this symposium will discuss the experiences of older adults who have relocated from their private

homes to various types of assisted living facilities and the multiple HRQOL challenges encountered with this transition. The other two papers will explore the effectiveness of using a theoretically-based nursing intervention designed to improve selected HRQOL indices for ill older adults. All of these papers represent research directly with older adults with implications for nursing practice that have been conducted by participants of the Hartford Institute for Geriatric Nursing Summer Scholars Program.

TELEMEDICINE INTERVENTION FOR HEART FAILURE PATIENTS WITH URINARY INCONTINENCE

S.Y. Hawkins¹, M.H. Palmer¹, J. Busby-Whitehead², 1. *University of North Carolina at Chapel Hill School of Nursing, Chapel Hill, North Carolina*, 2. *University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina*

Background: Urinary incontinence (UI) is prevalent in 45% of heart failure (HF) patients. Many UI patients have limited knowledge about its management. Home telemonitoring of chronic diseases seems to be a promising patient management approach. Methods: This study is a two group, pre-test/post-test, randomized control design based on a validated stages of behavioral change model. The sample consists of 30 incontinent HF inpatients. Following discharge, subjects are participating in 4 weekly telephone educational sessions with a nurse practitioner using UI or healthy lifestyle educational materials. Standardized questionnaires and 24-hour urinary pad tests are being used. Results: Descriptive statistics have been computed and differences in pre and post measures will be analyzed. Conclusions: Chronic diseases require innovative management. Should this intervention be effective in reducing wetness and increasing quality of life, another study will be undertaken to determine if incontinent HF patients can be successfully managed with a theory-based telemedicine intervention.

A RANDOMIZED CONTROL TRIAL OF A NURSING COMMUNICATION INTERVENTION TRANSITIONING INTO THE HOSPITAL

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Nurses are expected to care for older adults during fast-paced hospitalizations with minimal information about baseline function, yet this information is essential to planning care. The study purpose was to determine whether a model of preventive nursing communication during transitioning into the hospital improved problem identification and interventions (judgment) and patient recovery of baseline function (nutrition, cognition, continence, mobility). A prospective randomized design was used (N 101 experimental 147 control). Nurses were informed about patients’ pre-hospital baseline. Data collection over 7 days was from interviews/chart review. The communication intervention improved identification of geriatric syndromes ($t=2.28$, $p=.02$) and cognition (OR 2.54 CI 1.24-5.21 $p<.01$). While identification of some problems improved and nursing judgment was evident, proactive judgment was not. Recovery was adversely impacted by LOS ($p = .008$) but not our intervention. Findings have implications for practice by raising questions about the challenges of proactive care for acutely ill patients.

MIXED METHODS STUDY OF OLDER ADULTS' EXPERIENCES IN A TRADITIONAL AND SMALL HOUSE NURSING HOME

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A mixed-methods pilot study was conducted with residents (N=25, mean age = 84.04) of a skilled nursing facility who were given the option of relocating to a new "small house" model residence. Measures of health, physical function, at-homeness and other variables were gathered for movers (N=16) and non-movers (N = 9), at baseline, 3 months and 6 months after the move (or equivalent for non-movers). A longitudinal mixed model analysis revealed significantly different time effects between groups on ADLs ($p=0.0519$) and at-homeness ($p = 0.0079$). Movers (small house dwellers) demonstrated greater functional independence over time as measured by the Minimum Data Set. Movers had significantly lower levels of at-homeness at baseline (pre-move) and at-homeness increased over time after the move. Movers had greater depressive symptoms than non-movers at baseline and their depression decreased over 6 months (not statistically significant). Qualitative data validate findings and provide potential explanatory mechanisms.

METHODOLOGICAL CHALLENGES IN RESEARCHING INTIMACY IN ASSISTED LIVING FACILITIES

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Assisted Living (ALF) is growing rapidly as a housing option for seniors who need assistance with activities of daily living. Many ALF residents have lived in private homes, sometimes for decades, and may now be sharing a room with a stranger. They are faced with making new friends and adapting to a new activity level. This qualitative pilot study sought to begin to understand the lived experience of elders living in ALF with regards to meeting their needs for intimacy. The researcher spent months gaining access to the first two facilities and was able to complete only three interviews. A third facility was added and after the fourth interview further appointments were canceled. This presentation will discuss difficulties with access to appropriate participants and challenges with informed consent. The researcher will present suggestions for future study of sexuality and intimacy in older adults living in ALFs.

SESSION 1040 (PAPER)

MINORITY OLDER ADULTS

PHYSICAL PERFORMANCE AMONG AFRICAN-AMERICAN OLDER ADULTS: THE FOUR SQUARE STEP TEST

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Purpose/Hypothesis: Studies examining physical performance with emerging test instruments in African-American elders remain limited. The Four Square Step Test (FSST) is a unique functional mobility battery designed to examine balance performance in conjunction with multidirectional stepping in a four square cane matrix. The purpose of this pilot study was to examine and confirm the hypothesized relationship between performance on the FSST and other mobility and sociodemographic measures among 39 African-American older adults. **Participants:** Subjects included 39 community-dwelling African-American elders over 60 ($x = 73.8$; $SD = 7.6$; range: 60-90 years) living in home residences or senior housing facilities. **Materials/Methods:** Subjects completed a basic demographic profile, the FSST, the Berg Balance Scale (BBS), and Timed Up and Go (TUG) Test. Additional assessments included the 15-item Geriatric Depression Scale (GDS) and Falls Efficacy Scale-International (FES-I) tool. Data were analyzed using Pearson and Spearman rho correlations. Significance was set at the .05 level.

Results: Demographic profiles revealed that ten subjects (26%) had fallen over the past year. Fifteen (38%) subjects disclosed a fear of falling. Subjects demonstrated a mean test value of 19.6 ± 12.9 sec. on the FSST. FSST performance was significantly correlated with both BBS ($\rho = -.55$; $p < 0.01$) and TUG ($r = .75$; $p < 0.01$) scores, and GDS ($r = .56$; $p < 0.01$) ratings. A significant association was found between FSST performance and falls efficacy on the FES-I instrument ($\rho = .45$; $p < 0.01$). Multiple regression analysis demonstrated that FES-I and GDS scores predicted 31% of the variance in FSST performance. **Conclusions:** Data findings suggest that the Four Square Step Test demonstrates appropriate concurrent validity with other physical performance and affective tests among African-American elders. **Clinical Relevance:** Preliminary findings suggest the FSST offers a unique and psychometrically stable mode of functional mobility assessment which may be administered in a variety of diverse clinical geriatric settings.

FACTORS ASSOCIATED WITH POOR LOWER EXTREMITY FUNCTION IN PUERTO RICAN ADULTS

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Hispanics are the fastest growing ethnic group in the United States. Puerto Ricans are the second largest Hispanic subgroup in the country and the largest in the northeast, and they bear a disproportionate burden of disability. Poor physical function, specifically lower extremity function, is the hallmark of frailty and predicts adverse health outcomes in older adults including disability, nursing home admission, and mortality. Frailty is also associated with isolation and psychosocial distress. Although the prevalence of self-reported disability has been documented in Puerto Rican older adults, there is limited information about the association between lower extremity function and potential risk factors that may contribute to frailty and the disability disparity in this population. Therefore, we examined associations between frailty (measured as walking speed < 0.4 m/sec) and insulin resistance (Homeostasis Model Assessment), inflammation (C-Reactive Protein), and perceived stress (Perceived Stress Scale), independent of socio-demographic (age, sex, education and income) and lifestyle (smoking, alcohol and physical activity) factors in a sample of Puerto Rican adults aged 45-75 y living in the greater Boston, area. More than 52% of women and 39% of men were frail, measured by walking speed < 0.4 m/sec. By multivariate logistic regression analysis, frailty was associated with insulin resistance ($OR = 1.77$, 95% $CI = 1.22, 2.57$, $P < 0.002$) and higher perceived stress ($OR = 1.04$, $CI = 1.02, 1.05$, $P < 0.0001$), for each unit on a scale from 0.08 to 0.99 m/sec, but not inflammation, after adjustment for covariates. Targeted interventions are needed to reduce frailty in this rapidly growing high-risk population.

MEANINGFUL CHANGE IN PHYSICAL PERFORMANCE MEASURES OF OLDER AFRICAN AMERICANS

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The purpose of this research study is to determine the reliability and standard error of the measurement (SEM) – a distribution-based method for estimating small but meaningful individual-level change for the short physical performance battery (SPPB), gait speed, 6 minute walk distance, and timed up and go (TUG) speed in a sample of frail, older AA. **Methods:** Forty three older AA were tested a minimum of two times over a week period. SEM was calculated as $Sx \cdot (1-r)$, where r is the reliability coefficient. **Results:** 42 older adults, 92% female (79 + 9 yrs) completed 2 tests, and a subset of 15 completed three trials. Average BMI was 30, MMSE score was 25, and participants had multiple chronic conditions, the most common were: hypertension 71%, osteoarthritis 60%, diabetes and renal disease 40%. The mean SPPB

was 7.6 points (time 1-T1), 8.6 (time 2-T2); mean gait speed was 0.78 m/s (T1), 0.82 m/s (T2); mean 6 min-walk was 270 m (T1), 270 m (T2); and the mean TUG time was 12.9 sec (T1), 11.8 sec (T2). The SEM for SPPB was 1.15 sppb points, SEM for gait speed was .11 m/s; for 6-min-walk distance was 25 meters; and for TUG time was 1.6 sec. These data are consistent with published SEMs by Perera et al and suggest that the small and substantial meaningful changes reported for other samples would apply to older, frail African Americans.

WILLINGNESS OF ORGAN DONATIONS IN AFRICAN AMERICANS

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Introduction: Compared with whites, it had been reported that African Americans were less willing to donate their organs. The pervasive mistrust of health system was explained as one of this phenomenon. The present study was aimed at identifying reasons of less enthusiastic about organ donation in the African Americans. **Methods:** Cross-sectional data were gathered from 145 African Americans, ages were between 18 and 80, who were admitted in a hospital in the Midwest of the US with no history of dementia and schizophrenia. Participants did not have history of HIV, HBV, HCV and End-Stage Renal Disease (ESRD). Data collection was performed by face-to-face interviews. They were questioned about their willingness to donate organs if they were in case of brain death, and, if not, were asked to choose one out of three reasons behind their decisions: lack of information of organ donation, preference of being buried intact and mistrust of health system. Religious beliefs were defined as belonging to faith traditions regardless of their denominations. Logistic regression analysis was used to investigate the associations between willingness of organ donations and their attributable factors. The SPSS version 16 (SPSS Inc., Chicago, IL) was used. **Results:** 26.2% were willing to donate their organs. Participants had following characteristics: an average age \pm standard deviation(SD) (52.0 \pm 12.7), lives alone (12.4%), an average of number of co-morbidities (total 8 items) \pm SD (2.0 \pm 1.2), an average of utilizations of healthcare as outpatient or/and inpatient over the past 12 months \pm SD (3.41 \pm 2.46), lack of insurance (40.6%), presence of advance directive (living will or/and designation of durable power of attorney; 15.9%), and religious beliefs (79.4%). African Americans with old age ($p=0.008$, OR=1.07, CI 1.02-1.14), high number of healthcare utilizations ($p=0.027$, OR=1.33, CI 1.03-1.73) and religious beliefs ($p=0.047$, OR=3.40, CI 1.01-11.36) were more unfavorable to donate their organs. Preference of being buried intact (57.0%) was the most common reason that affected their decisions and was followed by lack of information about organ donation (29.9%) and mistrust of health system (13.1%). **Conclusions:** African Americans who were old and utilized healthcare services frequently were reluctant to donating their organs in case of their brain death. Recognition of their preference of being buried intact might help to understand why African Americans with religious beliefs were less enthusiastic about organ donation.

OSTEOPOROSIS SCREENING OF AFRICAN AMERICAN OLDER ADULTS

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Introduction: Women age over 65 can receive osteoporosis screening by the DEXA scan without copayment. African American postmenopausal women have a lower prevalence of the osteoporosis (4%) compared to whites (8%). However, African American postmenopausal women have a higher mortality after osteoporotic fractures. Lack of recognition of the risk factors and deficiency in the proper management

of osteoporosis in African American women might have contributed to this phenomenon. The purpose of present study was to measure the screening rate of the DEXA scan and to identify facilitators and barriers of the DEXA scan in African American elderly women. **Design:** A total of 402 women, age 65 and older were enrolled in a non-profit community health center. Retrospective electronic chart was reviewed for 28 months. Modified Charlson's co-morbidity index, medications that can affect their bone adversely (thyroid supplements, phenytoin, or systemic steroid administration for 3 months or more), and evidence of osteoporosis by the DEXA scan, x-ray and dictation and insurance status. Physicians' specialties were categorized as primary care and specialties regarding bone health (rheumatology, endocrinology, geriatric and orthopedic surgery). We asked physicians to rank the following medical categories according to their priority in screening their conditions (colon cancer, breast cancer, hyperlipidemia, pap smear, domestic violence, alcohol or substance abuse, and osteoporosis). **Results:** The osteoporosis screening rate was 15.9%. The prevalence of osteoporosis was 29.6%. Participants had following characteristics: an average of age \pm standard deviation (SD) was 74.8 \pm 7.04, an average of Charlson co-morbidity index was 5.08 \pm 1.49, offending medications were 22.3%, evidence of osteoporosis was 29.6% and premium insurance rate was 50.0%. Logistic regression analysis revealed the associations between the DEXA screening and its facilitators/barriers. Old age ($p=0.01$, OR=0.91, CI 0.86-0.96) was a barrier but evidence of osteoporosis ($p=0.001$, OR=6.33, CI 3.25-12.34), premium insurance ($p=0.02$, OR=2.09, CI 1.07-5.23), an average ranking of osteoporosis in physicians' screening priorities ($p=0.001$, OR=2.87, CI 1.57-5.23) were facilitators of the DEXA screening. **Conclusion:** The absolute rate of the DEXA scan (15.9%) was still low and prevalence of osteoporosis (29.6%) was higher than that of previous studies. Along with patients' demographic and socioeconomic status, physicians' preference of osteoporosis among health maintenance items contributed to the DEXA scan rate.

SESSION 1045 (POSTER)

HEALTH AND HEALTH PROMOTION

SOCIAL DETERMINANTS OF HEALTH-RELATED QUALITY OF LIFE TRAJECTORIES IN A COHORT OF OLDER CANADIANS

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Background: Longitudinal studies of how socioeconomic circumstances influence health status continue to be scarce in the research literature. These are important methodologically in that they establish socioeconomic conditions prior to health outcomes, thereby limiting the concern about an artefactual relationship between socioeconomic position and health status. This paper examines the social determinants of differences in health-related quality of life trajectories in a large cohort of Canadians. **Methods:** Trajectory analysis of six waves of the Canadian National Population Health Survey (initial sample > 17,000). The outcome of interest is the Health Utilities Index Mark III, a measure of health-related quality of life. **Results:** The trajectories for health-related quality of life as measured by the HUI III show differences by income and education at age 40. Those with low incomes and low educational attainment have poorer health-related quality of life at age 40 than their more affluent and better educated counterparts. After that time, trajectories appear to track in parallel, suggesting no obvious acceleration in decline in health related quality of life linked to socioeconomic characteristics. **Interpretation:** Health-related quality of life at midlife is determined, in part, by socioeconomic position, although the decline in

health-related quality of life after age 40 does not appear to be appreciably accelerated by social factors. The influences of early life seem to fix the trajectory of health-related quality of life in mid- and later life. Canada's population health record has historically been very favourable but inequality in household earnings has increased dramatically in the past 10 years and poverty rates have increased across all age groups. These broader socioeconomic changes may affect the health-related quality of life of older Canadians.

BRAIN FITNESS ACTIVITIES AND HEALTH AMONG FEMALE SENIOR CENTER PARTICIPANTS IN MONTREAL, CANADA

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With the increasing number of aging individuals living well into their nineties and the advent of the baby boom generation turning 65 years old, the number of individuals who will become afflicted with Alzheimer's Disease or other cognitive diseases will definitely increase. Little research has addressed the influence of brain fitness activities and their relationship to mental and physical health specifically among older women living in the community. Data were collected from nine French and English Senior Centers in Montreal, Quebec. A self-administered survey, translated in both English and French, was used among a sample of older women (N = 257). Multivariate Analysis (MANOVA) with post-hoc Bonferroni-t-tests revealed that activities such as aerobics, strength exercises, career decisions, working for pay, participating in a computer lab, learning new languages, group work and listening to speakers were significantly related to the physical health indicators of self-reported health and chronic conditions. Activities such as laughing together, career decisions, working together on a project, and strength exercises were significantly related to mental health indicators such as overall feelings (spirit), happiness and an interesting life. The results have implications for clinical practice and future research.

FACTORS ASSOCIATED WITH ADVANCE CARE PLANNING AMONG OLDER WOMEN IN SOUTHWEST FLORIDA

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As the nation's population continues to age, many older women will face care needs that can be anticipated in advance. However, little is known about the advance care plans of older women and the characteristics of those who plan. This study utilized a stratified random sampling design to survey older women (n = 124) in the state of Florida regarding their attitudes towards future care and planning behavior in social- environmental, health, and financial domains. Regression analyses were conducted to determine factors most predictive of attitudes towards future care and planning behavior by domain. Results suggest that advanced age predicts greater planning behavior, while living alone is associated with less advance care planning behavior. Other factors associated with less planning by domains of care needs include: income status, chronic health conditions, educational attainment, and religious status. Non-accepting attitudes toward planning were associated with a decreased likelihood to have advance care planning documents.

THE ROLE OF SPIRITUALITY IN HEALTHY AGING FOR GERIATRIC SOCIAL WORKERS AND THEIR PATIENTS

T.K. Amador, *Health Services Administration Dept., Regis University, Denver, Colorado*

Introduction: Geriatric health care professionals work within a complex health care industry, often described by staff and patients alike as fast-paced and stressful. Geriatric social workers are focusing on spiritual interventions such as prayer, meditation, and reflection to enhance their own well-being and the well-being of patients (Amador, 2007).

Literature Review: The use of spiritual interventions is controversial within social work practice due to questions surrounding the education and training of social workers (Hoyt, 2008). Research indicates, however, that social workers are widely utilizing spiritually based interventions with their patients (Sheridan, 2009). Methodology: Qualitative methods were utilized in this study of 40 geriatric social workers. Data were obtained through semi-structured interviews. Interviews were taped, transcribed, and analyzed using thematic analysis. Findings: Geriatric social workers reported nurturing their spirituality to promote a healthful body, mind, and soul. Regardless of specific religious or spiritual beliefs, most participants said they spend a considerable amount of time praying for their patients, colleagues, and career including whether they were in the right position and whether they were performing well. They also used spirituality in work with patients as part of a holistic approach to health. Conclusions: Geriatric social workers in this study were focused on spirituality for themselves and their patients. Participants felt that making a conscience choice to attend to their spiritual needs and those of their patients would improve long-term health and well-being. Spirituality as an intervention for healthy aging should be explored further and include other geriatric health care professionals. References Amador, Tristen K. (2007). Geriatric social workers: An exploration of job satisfaction, strengths, and motivation for continued care for older adults. Ph.D. dissertation, University of Houston, United States — Texas. (Publication No. AAT 3260228). Hoyt, C.A. (2008). What if the spirit does not move me? A personal reconnaissance and reconciliation. *Social Work*, 53(3), 223-231. Sheridan, M. (2009). Ethical issues in the use of spiritually based interventions in social work practice: What are we doing and why. *Journal of Religion and Spirituality in Social Work*, 28(1/2), 99-126.

LEGISLATING ADVANCE HEALTH CARE PLANNING: AN INNOVATIVE APPROACH

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Advance health care planning has the potential to decrease the cost of health care by eliminating unwanted intervention at the end of life, decrease the burden on courts that adjudicate guardianship cases that occur because the individual has not named a health care agent, and increase the chance that an individual's health care preferences will be followed when health care decision making capacity is lost (as it is for a majority of people prior to death). However, evidence shows that first generation living wills are of limited value in achieving these potential benefits. Based on the evidence, the Utah State Legislature recently repealed the 25-year-old Personal Choice and Living Will Act and replaced it with the Advance Health Care Directive Act, a model piece of legislation. The state used an innovative policy making process to develop an advance health care planning system that can inform policy making in other states. This poster outlines the steps the Utah Commission on Aging used to develop an advance health care planning system and to pass necessary legislation. It identifies key components of the collaborative process, from convening an expert multidisciplinary panel of health care and legal professionals, to reaching agreement on a guiding principle (autonomy) and objective (honor health care wishes), to drafting and passing the law. Finally, it specifies critical elements of the advance health care planning system implemented in Utah.

SELF-CARE PRACTICES OF GERIATRIC SOCIAL WORKERS

T.K. Amador, *Health Services Administration Dept., Regis University, Denver, Colorado*

Introduction: Geriatric health care professionals are at-risk of "burnout" due to their often demanding and emotional work with patients and families. The self-care practices of geriatric social workers were studied to better understand how burnout can be avoided and physical,

mental, and emotional well-being can be sustained (Amador, 2007). Literature Review: Burnout can be defined as “a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people work’ of some kind” (Maslach & Jackson, 1981, p. 99). This concept has been studied for many years yet remains a concern for health care professionals. Methodology: Forty geriatric social workers who had worked for at least one year with older adults and their families were interviewed in this qualitative study. Each participant’s interview was taped and transcribed in order for data to be analyzed and organized into themes (Amador, 2007). Findings: Self-care practices for participants included “processing” their experiences related to work and “disconnecting” from work. Additional forms of self-care included establishing and maintaining good relationships with loved ones such as family and friends. Finally, spirituality and exercise are also forms of self-care that geriatric social workers employed to improve well-being (Amador, 2007). Conclusions: Geriatric social workers explained self-care as necessary to sustain well-being and provided several creative practices such as processing and disconnecting. These practices and others must be utilized and expanded upon for optimal health and well-being of geriatric social workers and other geriatric health care professionals. References: Amador, Tristen K. (2007). Geriatric social workers: An exploration of job satisfaction, strengths, and motivation for continued care for older adults. Ph.D. dissertation, University of Houston, United States — Texas. (Publication No. AAT 3260228). Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2(2), 99-113.

USING HEALTH IT TO MEASURE CHANGES IN FUNCTIONAL ABILITY IN OLDER ADULTS WITH VISION IMPAIRMENT

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The purpose of this study was to assess changes in older adults’ functional ability in a vision rehabilitation setting using an electronic health record called Electronic Vision Rehabilitation Record (EVRR®) implemented at three agencies – representing urban, suburban, and rural rehabilitation settings. Vision rehabilitation services - individualized therapeutic interventions and counseling designed to restore functioning, safety and self-sufficiency to people with vision loss - include such interventions as techniques of orientation and mobility (safe travel), independent living tasks (cooking and child care safety), and psycho-social interventions. EVRR®’s methodology is consistent with the functional model of rehabilitation which involves the patient’s and the provider’s assessment of the patient’s functional difficulties and relating them to needed interventions. Following service delivery, patients are re-assessed to document changes in functioning. Study participants were 326 older adult clients who received orientation and mobility, 808 patients who received independent living services, and 51 patients who received psycho-social services. Results from paired t-tests demonstrate that all self-assessment and provider intervention functional ability scores significantly improved following the receipt of service. Hence, the use of the EVRR® system and its tools, specifically interventions that are based on standardized assessments, facilitate the restoration of functioning in patients with impaired vision and consequently help to reduce the disabling effects of vision loss.

METHODOLOGICAL RECOMMENDATIONS FOR CONDUCTING FORMATIVE EVALUATION OF COMMUNITY-BASED INTERVENTIONS: REVISION OF THE ARTHRITIS FOUNDATION WALK WITH EASE PROGRAM

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This poster describes the formative evaluation phase of a community-based intervention study to revise, update and test the Arthritis Foundation Walk With Ease (WWE) program, funded by the Centers for Disease Control and Prevention Arthritis Program. Originally created about ten years ago, WWE was designed to help participants: understand arthritis and its relationship with exercise and pain; use motivational strategies to set and monitor realistic goals for improving fitness; and learn appropriate stretching and strengthening exercises to protect joints and minimize pain. The current study involved standardizing and testing WWE in two delivery formats: instructor-led group and self-directed. Our formative evaluation was conducted as a two-phase process that included the triangulation of data collection targets (leaders, coordinators, participants in the original WWE program, and leaders and participants of the pilot of the revised program) as well as methods (written surveys, focus groups, and structured telephone interviews) in order to provide breadth and depth to our findings. Overall, these extensive data led to revisions in the intervention itself and to related materials, which were well-rated in subsequent testing. We describe our study population, methods, challenges, and findings in conducting a formative evaluation and share key tools we used. We also offer practical methodological recommendations to community service providers for conducting this kind of effort.

INFLUENCES OF SOCIAL ENVIRONMENTAL FACTORS ON THE PHYSICAL FUNCTIONING OF THE OLDEST OLD IN URBAN CHINA

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Purpose: This study focuses on how municipal-level social environmental factors interact with individual-level factors to influence physical functioning [Activity of Daily Living (ADL)] among the oldest old in urban China. Methods: Data are drawn from the fourth wave of the Chinese Longitudinal Healthy Longevity Survey and the 2005 Chinese Statistical Yearbook. The sample consisted of 3,830 older adults from 131 cities across China. Participants were on average age 86.3 (SD=1.21) years old, and 56.4% were female. Analyses were conducted using hierarchical linear modeling strategy. Individual-level factors include demographics, cognitive status, and engagement in activities. Municipal-level factors include Gross Domestic Product (GDP) per capita, three pollution indexes (industrial waste water, dust, and sulfur dioxide), and three indicators of health service availability (doctors, beds, and hospitals). Results: Findings disclosed that poorer health, less engagement in activities, and lower levels of cognitive status statistically predict more ADL limitations ($p<.01$). Two municipal-level predictors (GDP per capita and concentration of dust) significantly interact with individual factors to influence physical functioning. Compared to those living in more developed areas, participants living in less developed areas have a greater increase in their ADL limitations when their engagement in activities decreases. Compared to participants living in areas with lower dust concentration, those living in areas with higher levels of dust concentration have a sharper increase in ADL limitations as their cognitive function decrease. Implications: Interventions at individual levels should plan more social activities among older adults, and macro-level policy initiatives should facilitate local economic development without generating pollution.

OUTCOMES AND LESSONS FROM THE LIVING WELL PROJECT: IMPLEMENTING EVIDENCE-BASED WELLNESS PROGRAMS IN THE COMMUNITY

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In 2007, the "Living Well" Project was implemented in six regions of the State of Maryland. The project used Stanford University's Chronic Disease Self Management Program to empower people with chronic illness to take control of their own health. Towson University's Center for Productive Aging evaluated the implementation of this program through a process evaluation and data collected through baseline and post-test surveys administered to project participants. More than 800 participants completed the baseline surveys and to date we have post-test surveys from more than 700 of these participants. About 18% of the participants who began the program dropped out before completion; most because of health problems. The median age of participants was 76 years, and 80% were women. Participants were mostly White (68%) with 24% African American and the remaining were Asian, Hispanics and mixed ethnicities; 7% spoke a language other than English. Participants reported a range of chronic illnesses including diabetes (27%), hypertension (58%), lung disease (18%), arthritis (51%) and heart disease (19%). Preliminary analysis of the post-test data collected suggests that some modest improvements in health behaviors were reported. More often there were positive shifts in the extent to which participants reported that health interfered with social activities and the ability to do errands. This poster outlines the changes over time, the trends associated with program participation and the interpretation of the data in the context of the process evaluation findings and the implications for practice.

ASSOCIATION OF HEALTH STATUS AND REPORT OF DISCRIMINATION: DOES RESPONDENT AGE MATTER?

P.T. Ryder, J. Mulvaney, *Pharmacy Practice, Butler University, Indianapolis, Indiana*

Background: Reports of racial/ethnic discrimination have been associated with many health outcomes. Older people may have lived through times of institutional racism, yet they report discrimination less often. Lifetime discrimination is a source of chronic stress, which has been demonstrated to mimic and exacerbate aging. Discrimination may also lead to delayed healthcare or poor treatment adherence. These all contribute to health disparities, but little attention has been paid to how the association of discrimination and health varies by age. Methods: We use data from the 2004 Behavioral Risk Factor Surveillance Survey Reaction to Race Module from 7 states and the District of Columbia, to examine associations of report and reaction to discrimination in 4,555 non-Hispanic blacks, 22,673 non-Hispanic whites, and 1,382 Hispanics. Results: We create separate logistic regression models for each group to assess the association of age and reaction to discrimination while controlling for gender and education. Age (comparing ages 17-29 with ages 70+) and discrimination (comparing those reporting 2+ instances of unfair treatment versus those reporting none) are significantly associated with fair/poor self-reported health for whites and blacks (whites, OR age = 7.2, 95%CI=5.4-9.7, OR discrimination = 3.9, 95%CI=2.8-5.4; blacks OR age=7.0 95%CI=4.6-10.8, OR discrimination = 3.2, 95%CI=1.5-3.0). For Hispanics, age is significantly associated with fair/poor health (OR=4.3, 95%CI=2.0-9.5), but report of discrimination is not (OR=1.9, 95%CI=0.9-4.2). Conclusions: The relationship between report of discrimination and health status does vary by age. Whether differences are due to age, period, or cohort effects needs further investigation.

HEALTH LITERACY IN A GERIATRICS AMBULATORY PRACTICE: AN ASSESSMENT OF OLDER ADULTS AND THEIR CAREGIVERS

D. Greenberg, M. Dave, P. Wald Cagan, A. Ehrlich, *Montefiore Medical Center, Bronx, New York*

Background: Health literacy is the ability to understand and act on health information. Numeracy, the ability to use numbers in daily life, is a critical component of health literacy. Objectives: The purpose of this study was to measure health literacy levels of older adults and their caregivers in a multicultural, urban geriatrics practice using a test of reading comprehension: The Rapid Estimate of Adult Literacy in Medicine (REALM) and a test of health numeracy: The Newest Vital Sign (NVS). Methods: The REALM and NVS were administered to English and Spanish speaking patients at the time of their medical appointments. If patients were unable to participate due to a diagnosis of dementia or visual impairment, their caregivers were asked to complete the tools. 201 patients and 41 caregivers gave informed consent and participated in the study. Results: Patients: 86 % of patients scored at high school reading level on the REALM. 28% had limited literacy possible, 52% limited literacy likely on the NVS. Caregivers: 85% scored at high school reading level on the REALM. 25% had limited literacy possible, 31% had limited literacy likely on the NVS. Informal caregivers had higher levels of literacy than formal caregivers. Conclusion: The majority of patients and caregivers read at high school level in this study. However, over half of the patients scored as likely to have limited literacy on the NVS while 31% of caregivers were found likely to have limited literacy on the NVS. Further research is needed in using the NVS in the geriatric population.

UTILIZING GIS IN PUBLIC HEALTH RESEARCH TO EXPOSE PERSISTENT POOR HEALTH IN GEORGIA'S OLDER ADULT POPULATION

M.A. Okundaye¹, A.R. Fertig¹, D.C. Bachtel², A. Dahal³, *1. University of Georgia, Department of Health Policy and Management, Athens, Georgia, 2. University of Georgia, Department of Housing and Consumer Economics, Athens, Georgia, 3. University of Georgia, Department of Economics, Athens, Georgia*

Background: Older adults are vastly becoming a larger segment of our population. It is important to understand the impact that poverty has on population level health to a group already susceptible to age related mortality. Understanding how poverty interacts with health outcomes may also help to guide policy, and ultimately influence distribution of resources and support. In this study, easy to understand maps were created of indices of poor health for older (65+) Georgians by utilizing Geographic Information Systems (GIS) technology. Methods and Results: A 2003 University of Georgia study examined persistent poverty in Georgia and found 91 counties to be categorized as such. For this study, county level health outcomes of mortality rates due to Cancer, Diabetes, and falls/accidents for the nation's 3,140 counties were retrieved. By identifying those counties in the bottom 50th percentile of the nation for two time periods, 1992-1997 and 2000 to 2005, health indices were then created. Georgia's 159 counties were then extrapolated, further stratified into persistent poor health indices, and then mapped in various ways to examine relationships between persistent poor health and persistent poverty. Lastly, geographic characteristics such as urban, rural, and southern rural Blackbelt, were utilized to further examine demographic and economic trends in the state and how they compared to this study's findings of the interactions between poor health and poverty on older adults.

IMPACTS ON HEALTH OUTCOMES FOR OLDER ADULTS LIVING WITH CHRONIC ACS DISEASES

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Background: While obesity-related diseases are often preventable, their treatment and management require continuous monitoring and evaluation. These diseases are known as ambulatory-care sensitive (ACS), as they require a high level of outpatient care and can lead to poor health outcomes if not actively managed. This study examines impacts on health outcomes for older individuals living with chronic ambulatory-care sensitive diseases. **Methods:** This study analyzed cross-sectional data from the 2004 National Long Term Care Survey. The sample included 3,933 community-dwelling individuals 65 years or older. Respondents were included if they reported having one or more ACS conditions, including obesity, diabetes, arteriosclerosis, chronic pain, heart attack, heart problems, hypertension, and circulation trouble. Independent variables included demographic factors, ADL measures, socioeconomic variables, health care coverage variables, and measures of continuity of care. Models were constructed to isolate the effects of socioeconomic and health insurance coverage variables on overnight hospitalizations. Analyses were conducted using SAS version 9.1.3. **Results:** Results showed no significant differences between White and Blacks, although a significantly reduced risk was noted for respondents reporting race as other. Individuals with a history of diabetes, heart attack, or heart problems had a higher likelihood of hospitalization. No differences were noted among socioeconomic factors even after controlling for demographic factors and chronic disease indicators. Respondents having Medicare or private insurance coverage had a higher risk of being hospitalized. Respondents who had utilized emergency care services in the past month were more than twice as likely to experience hospitalization.

RESOURCES AND SUBJECTIVE HEALTH AMONG OLDER ADULTS

K. Daugherty¹, P. Martin¹, L. Poon², M. Johnson², 1. *Iowa State University, Ames, Iowa*, 2. *University of Georgia, Athens, Georgia*

With increasing age, older adults are more susceptible to disease; however, reports of self-rated health often do not change as people age. The objective of this study was to assess possible influences of different types of resources (e.g., social and economic resources, as well as mental and functional health) on concurrent and longitudinal subjective health ratings. Data for this study was taken from the first Georgia Centenarian Study. Participants (N = 176) were comprised of three age groups: sexagenarians, octogenarians, and centenarians. Structural Equation Modeling (SEM) was employed to test the direct influence of each resource variable on the latent variables of subjective health at time 1 and time 2. Age was also added included in the model. Results suggest that economic resources ($\beta = 0.18$, $p < .05$) and activities of daily living (ADL, $\beta = 0.44$, $p < .05$) significantly contributed to self-rated health at time 1. Age, mental health, and social resources were not significant. No resources at time 1 significantly predicted changes in self-rated health, however a modest relationship was obtained for ADLs and self-rated health at time 2 ($\beta = 0.26$, $p = .052$). In conclusion, subjective health is influenced by the unique contribution of activities of daily living (ADLs) and economic resources, not age. Change in subjective health is not influenced by economic resources; however, ADLs show a slight influence. Implications of these results suggest that economic and physical resources (ADLs) should be of concern for older adults and monitored for declines in subjective health.

GLOBAL AGING AND HEALTH: EXPANDING A SERVICE-LEARNING PARTNERSHIP FROM PORTLAND, OR TO NICARAGUA

M. Lopez Noron¹, K. Wilson^{1,2}, M.B. Neal², A. DeLaTorre², 1. *The Jessie F. Richardson Foundation, Clackamas, Oregon*, 2. *Institute on Aging, Portland State University, Portland, Oregon*

Beginning in 2004, Portland State University's (PSU) Institute on Aging (IOA) and the charitable non-profit organization the Jessie F. Richardson Foundation (JFR) began the joint design and teaching of an interdisciplinary service learning course on global aging and health with a focus on Nicaragua. That year culminated with two weeks of service with elders in Nicaragua for nine students and two faculty members from PSU. The program, Global Aging and Health: Enhancing Communities in Nicaragua, is now in its sixth year and has included 86 students, 7 faculty, and 11 staff members with an on-going relationship in a small Nicaraguan community, Boaco. This poster presentation will detail the how the local community partner (JFR), the university partner (IOA), the students participating in the program, and the international community stakeholders are working together to create sustainable solutions to support a growing elder population. For example, in 2008, Dr. Milton Lopez – a Nicaraguan geriatric physician and public health expert – was hired by JFR to facilitate community engagement throughout the year as part of an investment in indigenous capacity building through on-going training and community outreach. This investment has enabled student and faculty service work to become more efficient and effective as community needs and student skills have become more closely aligned. Each author will contribute a unique perspective that will elucidate the innovative partnership that is aiming to become a model for international service learning work with older adults in less developed countries.

HEALTH LITERACY AMONG OLDER ADULTS LIVING IN RURAL COMMUNITIES: IMPLICATIONS FOR HEALTH PROMOTION INTERVENTIONS

E.T. Jurkowski, *School of Social Work, Southern Illinois University Carbondale, Carbondale, Illinois*

Health disparities, according to Healthy People 2010 and the Centers for Disease Control and Prevention are greater in rural communities among older adults, when compared to urban communities. This study examined health literacy levels among older adults (n=300) who lived in rural and frontier communities in a Midwest from the aspects of behavioral and oral health. A survey tool, using the Knowledge, Attitude and Behavioral (KAB) approach was utilized to identify specific strengths and areas for development within the realm of one's health literacy. Subjects (n=300) were chosen through a random selection of Senior Nutrition Sites (N=4) within a thirty one county area within a Midwest state. Findings suggest that respondents were more likely to understand the importance of overall health, followed by behavioral health when compared to one's oral health. Findings also revealed that older adults do not consider the importance of health issues which are not covered by Medicare or Medicaid (ie: Preventative oral health procedures). Subjects also revealed that a limited emphasis was placed on health areas if Medicare or Medicaid health coverage was non-existent. Implications suggest that health promotion campaigns need to consider one's overall health literacy rather than merely the programs which can be reimbursed under the current health mechanisms. Policy and program interventions can include the expansion of current coverage to prevention and health promotion efforts among older adults.

HEALTH PROMOTION

COST-EFFECTIVE HEALTH PROMOTION FOR OLDER WORKERS: FINAL FINDINGS

S. Hughes^{1,2}, R. Seymour¹, R. Campbell^{1,2}, J. Shaw³, R. Sokas², C. Fabiyi¹, 1. *UTC Institute for Health Research and Policy, Chicago, Illinois*, 2. *UTC School of Public Health, Chicago, Illinois*, 3. *UTC Department of Pharmacy Administration, Chicago, Illinois*

Health behaviors adopted by older workers during employment could reduce Medicare expenditures after retirement. We used a randomized trial to test two health promotion interventions with older workers. The first intervention combines web-based risk assessments with an action plan that is negotiated with a "Coach" who provides personalized follow-up reinforcement. The second intervention is a web-based health risk assessment and risk profile with disease-specific follow-up reinforcement modules. Outcomes examined included participant health behaviors, absenteeism, presenteeism and use and cost of health services at baseline, 6 and 12 months. Participants (N = 423) had a mean age of 51, ranging from 40-68. Approximately 80% were female, 62% minority, 81% reported at least one chronic condition, and 75% were overweight or obese. Analyses indicate that COACH participants experienced significant improvements on: stress and health-related stress at 6 months; participation in moderate physical activity at 6 and 12 months; and, on percent of energy from fat at 6 and 12 months and intake of fruits and vegetables at 12 months. COACH participants also used the program more extensively than RealAge participants (97% vs. 57%, respectively). Findings from this study provide insight into the development and implementation of cost-effective health promotion programs for our burgeoning number of older workers. We will also describe a follow-up study that has been funded to evaluate the translatability of the two interventions. The follow up study is examining preferences for packaging and marketing the programs, and barriers and facilitators to adoption, implementation, and maintenance.

HOW MUCH ARE PEOPLE DRINKING, ANYWAY: FINDINGS FROM NESARC

L.M. Ginzer, V.E. Richardson, *The Ohio State University, Columbus, Ohio*

The DSM diagnostic criteria for alcohol use disorders are based on behaviors, physiological responses to alcohol consumption, and consequences, not quantities of alcohol consumed. This analysis examines quantities of alcohol consumed and the frequency of binge drinking as a function of age and diagnosis, including the "at-risk" diagnostic level defined for people over the age of 60. Data are from the first wave of the National Epidemiological Survey on Alcohol and Related Conditions (NESARC) comprised of over 43000 US dwelling non-institutionalized people. Findings show that drinking at the dependence and abuse levels increase with age even though the overall levels of drinking decrease. Binge drinking levels decrease slightly after age 60 for those with alcohol abuse diagnoses. Interestingly, those without alcohol abuse diagnoses drink only slightly less than those with alcohol abuse diagnoses at all age groups although older adults binge drink considerably less than younger persons. Still, the presence of binge drinking at all diagnostic levels and ages is of concern. A significant percentage of those with dependence or abuse significantly reduce their drinking over a 12-month interval. These findings are important for practitioners assessing older adults' drinking behaviors and when communicating with older adults about healthy behaviors.

HEALTH PROMOTION WITH AFRICAN AMERICAN ELDERS: DETERMINING STRATEGIES AND INTERVENTIONS FOR AN URBAN ENVIRONMENT

C. Waites, S. Robinson-Lynk, F. Martin, *Social Work, Wayne State University, Detroit, Michigan*

This study explores strategies and interventions for health promotion with African American elders residing in an urban environment. With the growing number of aging African Americans, it is vital that health professionals and researchers identify culturally compatible health promotion strategies and interventions. Generally, we understand a great deal about the relationship between individual behavior and healthy aging. However, much less is known about the impact of the environment in the context of the aging process – especially among African Americans elders. Using a social ecological framework, this study examines the environment and the geographic accessibility of greenways, walking trails, health supporting services, senior centers, aggregate meal programs, casinos, transportation resources and other aging services available within the metropolitan Detroit, Michigan area. The study also examines the values, attitudes and traditions regarding healthy aging and health promotion of the elders who live in these communities. Geographic information system analysis (GIS), focus groups and surveys were conducted. Findings show that urban African American elders express interest in health and healthy lifestyles. Most important was their desire to maintain their independence and to engage in fulfilling social activity. They indicated that access to safe places to walk and having access to a senior center with a variety of activities and educational programs was sometimes challenging. They wanted more programs in their communities which will assist them in staying active and allow them to age in place.

IMPACT OF SUBJECTIVE AND OBJECTIVE NEIGHBORHOOD MEASURES ON DEPRESSION AMONG OLDER MEXICAN AMERICANS

K. Gerst, M. Peek, *University of Texas Medical Branch, Galveston, Texas*

Extant literature has suggested that neighborhoods are an important predictor of physical health. However, few studies have examined such a neighborhood effect on mental health outcomes, and none have examined subjective measures of neighborhood in addition to objective measures. This study examines the associations between subjective and objective neighborhood measures on depressive symptoms among Mexican American elders. Two-level hierarchical analyses were done using the fifth wave (2004-2005) of the Hispanic Established Populations for Epidemiologic Studies of the Elderly (Hispanic-EPESE). The sample consisted of 1,376 Mexican Americans aged 75 and over living in 307 neighborhoods across five southwestern states. The outcome was measured using the Center for Epidemiological Studies Depression Scale. The subjective neighborhood context was measured using the Social Cohesion and Trust Scale (SC&T). Objective neighborhood variables were matched to individual cases using 2000 US Census tract data. Results showed that high depressive symptoms varied across neighborhoods, even when controlling for individual and contextual variables. Among contextual level variables, the percent Mexican Americans in the neighborhood was significantly related to high depressive symptoms ($\beta = -0.02$), as was the percent of persons aged 75 and over living in the neighborhood ($\beta = -0.12$). Even after controlling for these additional variables, higher scores on SC&T were a significant predictor of high depressive symptoms ($\beta = 0.07$). We find that the effects of subjective and objective measures of neighborhood are independently associated with depressive symptoms. Future studies should therefore not only include community-level factors when examining mental health, but also respondents' subjective view of the neighborhood.

INTERVENTION IN PEDESTRIAN ENVIRONMENTS: OLDER PEOPLE'S APPRAISAL OF ENVIRONMENTAL MEASURES TAKEN, DIFFICULTY OF WALKING AND FREQUENCY OF ACTIVITY

S. Iwarsson¹, A. Stahl², 1. *Health Sciences, Lund University, Lund, Sweden*, 2. *Lund Institute of Technology, Lund University, Lund, Sweden*

OBJECTIVES: To investigate older inhabitants' appraisal of environmental measures taken in their residential area, overall and related to age, sex, perceived health, use of mobility devices and mode of transport, and to follow changes in perceived difficulty in walking, and changes in outdoor activity as related to age, change in perceived health, and use of mobility devices and mode of transport. **DESIGN:** Evaluation of an intervention project, based on data collected with a pre-/after postal questionnaire. **SETTING:** Residential area in a medium-sized Swedish town. **PARTICIPANTS:** 195 community-living people aged 65+ responded to postal questionnaires at baseline and at a 5-year follow-up. **MEASUREMENTS:** Appraisal of environmental measures taken in the pedestrian environment in the residential area, perceived health, use of mobility devices, mode of transport, change in perceived difficulty in walking, change in frequency of outdoor activity. **RESULTS:** Older people's appraisal of environmental measures taken in their residential area is overall positive, with women reporting higher appraisal, in particular as regards longer green time at signalised crossings. Overall appraisal was higher for those reporting better perceived health, in particular concerning separation between bicyclists and pedestrians. Also use of mobility devices influenced the appraisal of specific environmental measures. There was no significant change in difficulty in walking and actually the outdoor activity decreased over time, overall as well as in sub-groups. **CONCLUSION:** The main contribution of the current study is on the one hand the identification of which environmental measures older people appreciate, on the other the identification of the topical participant variables influencing their appraisal, indicating that there are sub-groups that benefit more of this kind of intervention in pedestrian environments.

SESSION 1055 (SYMPOSIUM)

NURSING HOME CULTURE CHANGE: PUTTING PROMISE INTO PRACTICE

Chair: *M. Bern-Klug, Social Work, University of Iowa, Iowa City, Iowa*
Discussant: *D. Downes, Jewish Home Lifecare, New York City, New York*

A sense of home (rather than of "hospital") is valued by people who live in residential long-term care settings. The term "home" conveys physical and emotional comfort as well as a sense of promise. Promise that basic human rights like privacy and basic human values like dignity will be honored. This symposium addresses the extent to which the promise of culture change has resulted in improved practices, by reporting the results of a critical review of green house homes based on existing literature; describing a study designed to measure culture change in one state; reporting the characteristics of nursing home social service directors who are involved in culture change; and by describing the link between social worker role identity and resident outcomes, and how building on this connection may help to facilitate culture change.

A CRITICAL EVALUATION OF GREEN HOUSE® HOMES IN THE CONTEXT OF EXISTING LITERATURE

S. Zimmerman, L.W. Cohen, Cecil G. *Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

The Green House® model is a style of small home skilled nursing care. These homes house 10-12 residents (called elders), have private rooms, a central hearth/living area, a communal dining area, open kitchen, universal workers, and non-hierarchical staffing. They have stimulated great interest and despite little outcomes research, there are 50 homes in operation and 130 in development. This presentation will provide

results of a detailed literature review that examined explicit and implicit components (structure, process, outcome) of the Green House model which was conducted after an expert panel achieved majority consensus regarding the extent to which each component was seminal to the model. For example, all experts agreed the organization of staffing was seminal. The related literature indicated that minimum recommended staffing thresholds (which are not met in 97% of all nursing homes) are met for both direct care and licensed staff in Green House homes.

THE LOUISIANA CULTURE CHANGE STUDY: EVALUATING NURSING HOME SOCIAL WORKERS AND CULTURE CHANGE

P.D. Allen, *School of Social Work, Louisiana State University, Baton Rouge, Louisiana*

The nursing home culture change movement seeks to improve nursing home resident health by building environments that lead to enhanced staff-resident relationships—relationships created and maintained through resident-centered choices. Social workers are logical agents to aid in this multidimensional movement that aims to improve all aspects of life within the nursing facility, such as standards as care quality, satisfaction, and staff retention and commitment. The purpose of this paper is to assess Louisiana's nursing homes in term of implementation of culture change and to highlight the role of social workers. The study compares the implementation rates of culture change with the level of training and education of social workers/social service designees. Facilities with higher implementation rates in three of the six of the culture change categories were significantly related to social work education level: Staffing, Homelike Environment, and Activities.

THE LINK BETWEEN SOCIAL WORK ROLE IDENTITY AND POSITIVE OUTCOMES IN PSYCHOSOCIAL CARE: IMPLICATIONS FOR THE SOCIAL CULTURE OF SKILLED NURSING FACILITIES

R.P. Bonifas, *Social Work, Arizona State University, Phoenix, Arizona*

Cultural change efforts in skilled nursing facilities have demonstrated a connection between the well-being of employees and the well-being of facility residents. However, facility social service providers have received limited attention in cultural change research. This presentation reviews recent findings that link stronger role identity among social service directors (SSDs) with positive outcomes in resident psychosocial care as identified by facility state survey inspectors. Differences by role identity level indicate that SSDs with stronger role identity are more likely to notify residents of upcoming changes, feel more influential in their facilities, and receive more support from co-workers. In addition, they ascribe a higher priority to accessing mental health services and financial resources for facility residents, more frequently provide linkage to community resources, and are more involved with resident advocacy efforts. The implications of these findings for cultural change and creating supportive working environments for facility SSDs will be discussed.

CHARACTERISTICS OF NURSING HOME SOCIAL WORKERS WHO REPORT INVOLVEMENT WITH CULTURE CHANGE

M. Bern-Klug¹, N. Takahashi², L. Levy-Storms², 1. *Social Work, University of Iowa, Iowa City, Iowa*, 2. *UCLA, Los Angeles, California*

Nursing home (NH) social workers are responsible for working toward resident psychosocial (emotional) well-being, which overlaps with a premise of the culture change movement: that the emotional experience of living in a long-term care setting is vitally important. This study looks at the extent to which NH and social service (SS) departments are involved with culture change. Findings (national sample of 1,071 NH SS directors) revealed variation: 43% reported their NH was involved in culture change, 26% "no" and 31% "I don't know." Among those whose NH was part of the culture change movement, 20% reported

that SS was the lead department for culture change, and 69% reported department involvement but not lead. The remaining 12% reported “other” and many wrote in “all departments are equally involved.” Logistic regression results indicated that region, number of beds, and profit status are related to culture change.

SUCCESSSES AND CHALLENGES IN IMPLEMENTING SMALL-HOUSE NURSING HOMES

R.A. Kane, L. Cutler, *Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota*

Using examples from 3 large, multi-site, multi-level firms, we identify challenges in sustaining and expanding small-house nursing homes within an organization. At the level of the individual house we discuss role definitions for professionals, integration cooking and other roles into the front-line universal workers’ job descriptions, recruitment and training at all levels, and leadership. Small-house models require rethinking of every role in a nursing home—e.g. director of nurses, administrator, staff developer, activities director, dietary personnel social worker, or MDS coordinator. The models also require rethinking functions such as admissions, and quality assurance, managing post-acute care and adapting staffing patterns to different resident mixes in the various houses. Institution creep must be constantly avoided. At the system level, it is challenging to develop a small-house program while maintaining other foci of excellence—e.g. in assisted living or senior housing.

SESSION 1060 (SYMPOSIUM)

OLDER WORKERS IN HEALTH AND SOCIAL SERVICE SETTINGS

Chair: S. Butler, *University of Maine/School of Social Work, Orono, Maine*
Discussant: A. Barusch, *University of Utah and University of Otago, Salt Lake City, Utah*

According to the Bureau of Labor Statistics (BLS, 2008) employment of workers 65 and older increased 101% over the past three decades, as compared to a 59% increase for total employment (i.e., workers 16 and older). Moreover, BLS data indicate that while the total workforce is projected to increase by 8.5% in the next decade, the rate of increase for people 55-64 is expected to be 36.5% and for those over 65, more than 80%. Industries with labor shortages, such as health care and social services, face a shrinking pool of younger workers, requiring more focused attention on hiring and retaining older workers. Although age discrimination is ubiquitous, considerable evidence demonstrates that older workers have characteristics that make them ideally suited to caring professions: experience, maturity, loyalty, good judgment, dependability, and reliability. This symposium explores the experiences of older workers in four health and social service settings: child welfare, nursing education and practice, and home care. Cohen-Callow and co-authors report on a large study of child welfare workers comparing organizational experiences, turnover and work withdrawal behaviors of younger and older workers. Falk presents results from her grounded theory study focused on deans’ perceptions of extending the academic employment of aging nurse faculty. From a statewide survey, McIntosh and co-authors compare responses of older and younger nurses on general health, emotional health, and intention to leave their jobs. Butler and co-authors explore results from survey research on the job experiences of home care workers and highlights differences by worker age.

JOB EXPERIENCES OF OLDER HOME CARE WORKERS

S. Butler¹, M. Brennan², W. Turner¹, A. Ashley¹, 1. *University of Maine/School of Social Work, Orono, Maine*, 2. *AIDS Community Research Initiative of America, New York City, New York*

Maintaining an adequate supply of frontline workers in our long-term care system is challenging. As the baby boom generation ages and the supply of younger workers decreases, encouraging older workers to enter or remain in the field of direct care could be a win-win situation:

it provides meaningful work to older adults and workers to an industry facing labor shortages. This paper reports on a study of Personal Support Specialists in homecare (n=261) throughout Maine. Participants ranged in age from 18 to 82, with a mean age of 46. Increased age was related to lower physical function ($p < .05$) but greater social function ($p < .05$) and greater vitality ($p < .05$). Job burnout scores did not differ significantly by age, although older workers appeared to feel emotional exhaustion less intensely than younger workers ($p < .01$). Implications related to recruitment and retention of older workers will be outlined.

RETAINING THE WISDOM OF AGING NURSE FACULTY THROUGH RE-ADJUSTMENT

N.L. Falk, *George Mason University, Falls Church, Virginia*

By 2016, over one million new and replacement nurses will be needed to care for an aging U.S. population. Nurse faculty members are vital to educating nurses; yet, on average, they are over 50 years of age and face key retirement decisions. In 2006-2007, about 30,000 qualified applications were denied admission to nursing programs due largely to the faculty shortage. Continued employment of aging nurse faculty offers potential benefits to stakeholders. In this grounded theory study, interviews were conducted with deans from 9 diverse baccalaureate nursing programs in 8 states to gain understanding about perceptions related to extending the academic working life of aging nurse faculty. Findings reveal: aging nurse faculty are highly valued, programs and faculty face environmental challenges, when aging faculty fail to keep current—a mismatch, or “stakeholder incongruence” may occur, and re-adjustment can lessen the incongruence. Session attendees will be equipped to identify practical re-adjustment opportunities.

RNS PERCEPTIONS OF EMPLOYER HEALTH AND SAFETY INITIATIVES AND RETENTION

B. McIntosh, B. Rambur, M. Palumbo, *University of Vermont, Burlington, Vermont*

Retention of nurses in the workforce will continue to be important given growing shortages and increasing demand (US Department of Health and Human Services, 2002). Employer health and safety interventions are particularly important in the context of nurses’ perceived general and emotional health and their reported intention to leave their jobs (ANA, 2007). This study utilized a mail survey sent with standard relicensure materials to all RNs in a small rural state in March, 2007 (53% response rate, $n = 3,955$). Not unexpectedly, both physical and emotional health were predictors of intention to leave in both age cohorts (under 55 and 55+). Employer’s attention to safety practices was a strong predictor of intention to leave among nurses under 55 years of age and a slightly weaker predictor among those 55+. Perceptions of employers’ attention to health was a predictor of younger nurses intention to leave but not nurses 55 and older.

APPLICATION OF THE LIFE COURSE MODEL: DIFFERENCES BETWEEN YOUNGER AND OLDER WORKERS IN THE PUBLIC SECTOR

A. Cohen-Callow, K. Hopkins, H. Kim, *University of Maryland School of Social Work, Baltimore, Maryland*

Little evidenced based information exists on how best to respond to calls made for the public sector to retain older workers in service areas with high turnover. Using the life course model as a framework for this research, data was analyzed from a cross-sectional study of a random selection of employed child welfare workers in one East coast state ($n = 516$). Study participants ranged in age from 23 – 67 years of age. Generational differences were found with Baby boomers reporting lower levels of work withdrawal (i.e., absenteeism, unfavorable behaviors) ($p < .0005$), fewer search behaviors ($p = .06$), lower levels of stress ($p = .04$), and lower levels of work-life interference ($p = .02$) than Genera-

tion X workers. Discussion will address retention strategies and research that takes into account potential differences among cohorts of workers.

SESSION 1065 (SYMPOSIUM)

ORGANIZING AGAINST THE ATTACK ON ENTITLEMENTS: CURRENT POLICY AND ADVOCACY STRATEGIES IN SUPPORT OF SOCIAL INSURANCE

Chair: *L. Rogne, Minnesota State University, Mankato, Minnesota*

Discussant: *E. Kingson, Syracuse University, Syracuse, New York*

As the American people, a new Presidential Administration, and a new U.S. Congress struggle with an economic crisis, familiar forces favoring privatization of Social Security and the dismantling of our fundamental social insurance programs have capitalized on anxiety about our economic futures with a renewed attack on entitlements. Policy and advocacy groups supporting social insurance have mobilized to inform the public and advise policy makers about the realities of Social Security and Medicare and to assure that the programs that have provided for basic health and economic security in this country will be preserved and enhanced. Faced with a renewed wave of conversation in the political arena and in the media about the notion of a Social Security and Medicare funding “crisis,” policy experts and advocates are using social networking strategies, including the Internet, to respond quickly to proposals for drastic changes in social insurance programs. This symposium brings together leading scholars and advocates to discuss how they are working together to respond quickly and effectively to media misinformation and policy proposals that threaten social insurance programs. Presenters talk about how to translate key policy issues related to Social Security and Medicare into talking points for use with the public and policy makers and discuss how they are organizing resistance to proposals that would undermine basic social insurance principles.

SOCIAL INSURANCE AND THE CLAUDE PEPPER LEGACY

L. Polivka, Florida Policy Exchange Center on Aging, Tampa, Florida

This presentation is based on the perspective that Senator Claude Pepper’s vision of social insurance strategies for ensuring retirement security is as relevant today as it was over the course of his long career in public service. In fact the presentation will argue that Social Security, Medicare, and an improved Medicaid long-term care program will be more essential sources of retirement security for the baby boomers than they have been for their parents. The increasing importance of these programs is a function of deterioration in the private pension system, stagnant wages, declining savings, rising health care costs over the last 30+ years, and the projected need for over \$240,000 in savings to cover health care costs by 2030. The presentation will conclude with a discussion of “What Claude Would Do” if he were alive today, based on his social philosophy and legislative record.

HEALTH CARE REFORM AND THE DEFENSE OF SOCIAL INSURANCE

S. Gorin, Social Work, Plymouth State University, Canterbury, New Hampshire

Advocates of health care reform can play a critical role in defending social insurance programs. In recent years, individuals from a range of perspectives have argued that the United States faces an “entitlement crisis,” which can only be addressed by cutting spending on Social Security and Medicare. Yet, Social Security has built up a surplus that will remain for at least another thirty years. Medicare costs have accelerated, but this is a reflection and consequence of health care inflation generally. The solution to the “entitlement crisis” is not cutting Social Security and Medicare but reforming our health care system, a point not always understood by health care reform advocates. If advocates of health care reform and defenders of social insurance join together they can strengthen each movement. This paper describes efforts to bring these groups together.

THE ASSAULT ON SOCIAL SECURITY AND THE BIRTH OF A COUNTERMOVEMENT

C.L. Estes¹, J. Svihula³, B. Hollister¹, B. Grossman¹, L. Rogne², 1. UCSF, San Francisco, California, 2. Minnesota State University-Mankato, Mankato, Minnesota, 3. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina

While antagonists have existed since Social Security’s inception in 1935, opposition to the program reached a climax in President Bush’s second term privatization campaign. Alongside federal budget deficits and the US economic meltdown, efforts persist to dismantle social insurance and the social contract via calls for “Entitlement Reform” and claims of the unsustainability of Social Security and Medicare. In this political cauldron, the authors contend that a fragmented set of actors and organizations (working separately and together) have emerged to produce a fledgling countermovement of resistance. Social Movement theories (e.g., resource mobilization and political opportunity) are utilized in examining the development, composition, activities, and promise of this countermovement. Data sources include congressional and administrative documents, think tank Web Sites, The Congressional Quarterly and other online databases and groups, Obama White House convenings, and statements of public opinion leaders and advocates (2000-2009).

SILENCING CHICKEN LITTLE: CALMING THE HYSTERIA AROUND SOCIAL INSURANCE PROGRAMS THROUGH EDUCATION AND GRASSROOTS ADVOCACY

K.M. Snell, S.L. Byrne, Government Affairs, Alliance for Retired Americans, Washington, District of Columbia

Participants will understand how organizations and coalitions have worked to defuse the public’s growing anxiety about suggested implications of the current economic and demographic trends’ effect on social insurance programs. They will appreciate the historical and ongoing work protecting and enhancing these programs, including field campaigns, amplifying the truth about the programs, and issuing regular, targeted publications tracking both proponents’ and oppositions’ activities. The new political environment requires a fresh paradigm of how to approach policy makers in a proactive, supportive, and principled manner. This presentation highlights how to efficiently and collaboratively be a relevant voice in policy discussions about social insurance programs in the political arena. Participants will understand strategy on developing political relationships to ensure credibility and a place at the table. Finally, new approaches to organizing and amplifying the grassroots’ voice in this discussion will be shared, including on line and digital video advocacy and organizing methods.

WHAT ENTITLED YOUTH? SOCIAL INSURANCE, MILLENNIAL ORGANIZING, AND A NEW METHOD OF POLITICAL ENGAGEMENT

C. Howarth, Policy, Roosevelt Institution, Washington, District of Columbia

Objective 1: After attending this session participants will be able to: Translate central social insurance principles and policies into messages suitable for both mainstream and youth-oriented markets. Objective 2: After attending this session participants will be able to: Create successful strategies for engaging and mobilizing young student and non-student populations around the issues raised by social insurance policy. Program Overview: As the 111th Congress gets underway, many have raised the specter of an “entitlement crisis” that requires immediate and drastic cuts to current spending on the federal government’s three largest domestic programs: Medicare, Medicaid, and Social Security. All groups along the ideological spectrum have launched campaigns targeted to young people, seeking to convince them of their arguments and mobilize their actions and their votes on the issue. Yet few campaigns, if any, have generated widespread youth engagement or any measure of rapid values-realignment. This presentation will focus on where policy framing meets

youth engagement, and a new era of political involvement that is unique to the Millennial generation. It will also explore social insurance's unique place among young people, both students and non-students, and suggest new organizing methods that directly capitalize upon young people's relationships to entitlement programs, emphasizing first-hand experience, Millennial messaging, and grassroots mobilization.

SESSION 1070 (SYMPOSIUM)

THE 2007 NATIONAL HOME AND HOSPICE CARE SURVEY (NHHCS): PROVIDERS, PATIENTS, AND HOME HEALTH AIDES

Chair: *L. Harris-Kojetin, National Center for Health Statistics, Hyattsville, Maryland*

Discussant: *P.H. Feldman, Center for Home Care Policy and Research Visiting Nurse Service of New York, New York, New York*

This symposium highlights new nationally representative data from the 2007 National Home and Hospice Care Survey (NHHCS) which can be used to examine health care topics concerning aging, chronically ill, and disabled populations. The 2007 NHHCS response rate was 71 percent and the public use data files are scheduled to be released in spring 2009. This session gives an overview of the 2007 NHHCS; provides data highlights on agencies, patients, and aides; and explains how to access the public use files to conduct analyses. The 2007 NHHCS is one in a series of national probability sample surveys of home health and hospice agencies conducted periodically since 1992. The 2007 NHHCS was redesigned and expanded to better meet the data needs of health care planners working to ensure that quality long-term care will be available for a growing senior population. New survey items include information on the training and certification of key personnel, electronic information systems, patient health and functional status, emergency department use and hospitalizations, medications, pain management, and end-of-life care. The 2007 NHHCS includes the first national survey of home health aides. With the population of older adults projected to double in the next 25 years, the desire of people to age in place, and a growing emphasis on home and community-based services, home health and hospice care are likely to play greater roles in the continuum of long-term care services. NHHCS provides valuable data to explore and track health care and policy issues affecting our growing aging population.

OVERVIEW OF THE REDESIGNED 2007 NATIONAL HOME AND HOSPICE CARE SURVEY (NHHCS)

L. Harris-Kojetin, National Center for Health Statistics, Hyattsville, Maryland

NHHCS uses a nationally representative probability sample of home health and hospice agencies to collect data on agencies, their patients, and staffs. The 2007 NHHCS was redesigned and expanded to better meet the data needs of researchers and health care planners working to ensure that quality long-term care will be available for the Nation's growing senior population. Conducted between August 2007 and February 2008, data were collected on 1,036 agencies, about 4,700 current home health patients, and about 4,700 hospice discharges through interviews with agency representatives. The 2007 NHHCS response rate was 71 percent. As a supplement to NHHCS, the first ever National Home Health Aide Survey collected data on home health aides working in home health or hospice agencies through 3,416 interviews completed between September 2007 and April 2008. This presentation explains key features of the redesign and describes some new content collected on agencies, patients, and aides.

COMPARISON OF HOME HEALTH AND HOSPICE AGENCIES BY ORGANIZATIONAL CHARACTERISTICS AND SERVICES PROVIDED

E. Park-Lee, F.H. Decker, National Center for Health Statistics, Hyattsville, Maryland

Demand for home health and hospice care has been growing over the years. Adding hospice benefits to Medicare in 1982 and the advent of a home health prospective payment system in 2000, together with increased awareness by patients and families of home health and hospice services as alternatives to institutional care, have led to an increase in the number of agencies providing these services. The 2007 National Home and Hospice Care Survey (NHHCS) collected nationally representative information on 1,036 home health and hospice agencies. Three types of agencies - home health only, hospice only, and mixed - were compared by organizational characteristics (e.g., ownership status, Medicare/Medicaid certification, freestanding vs. others, and region) and services they provide. Information on the similarities and/or differences in the configuration of these agencies contributes to enhancing patients' and policymakers' understanding of how the needs for home health and hospice care are being met.

AN OVERVIEW OF THE 2007 NATIONAL HOME HEALTH AIDE SURVEY

A. Bercovitz, A.J. Moss, M. Sengupta, E. Park-Lee, A. Jones, L. Harris-Kojetin, Long Term Care Statistics Branch, National Center for Health Statistics, Hyattsville, Maryland

This presentation will provide an overview of, and highlight selected national estimates for, the 2007 National Home Health Aide Survey (NHHAS), the first nationally representative survey of home health aides employed by agencies providing home health or hospice care. NHHAS includes variables on demographics; family structure and responsibilities; job benefits, including health insurance; use of public benefits; job history; job characteristics, including wages and hours worked and workload; measures of satisfaction with job and supervisor; training; travel time; and number, type, and cause of work-related injuries. NHHAS was designed to be comparable to the 2004 National Nursing Assistant Survey, with identical wording for many questions across the two surveys, permitting comparison of direct care workers across long-term care settings. The NHHAS file may also be linked with the National Home and Hospice Care Survey (NHHCS) agency file to control for agency characteristics.

NATIONAL HOME AND HOSPICE CARE SURVEY: PATIENT DATA

L.L. Dwyer, C. Caffrey, A. Jones, M. Sengupta, A. Moss, L. Harris-Kojetin, Division of Health Care Statistics, National Center for Health Statistics/CDC, Hyattsville, Maryland

The patient health (PH) and payment (PA) modules in the 2007 National Home and Hospice Care Survey contained many new content areas compared to previous survey years. The new content included questions about pain management, medications taken, advance directives, emergent care, and out-of-pocket expenses, to name some examples. Data were collected on approximately 4,700 current home health patients and 4,800 hospice discharges across more than 1,000 agencies. The patient modules had high response rates—95.4 percent for PH and 94.4 percent for PA. This presentation will highlight national estimates on selected new survey items for home health patients and hospice discharges and give information on how and where to access the online patient/discharge public-use data file and web documentation.

SESSION 1075 (SYMPOSIUM)

GENOME AND EPIGENOME INSTABILITY IN AGING

Chair: J. Vijg, *Genetics, Albert Einstein College of Medicine, Bronx, New York, New York*

Evidence is now accumulating that erosion of genome and epigenome informational integrity is a critical factor not only in cancer but also in non-cancer, age-related cell and tissue degeneration. Highly conserved pathways have evolved to detect the presence of genome damage, effectuate its repair or signal cellular responses, such as apoptosis and senescence. Understanding the cellular pathways involved in these processes during normal cellular development and aging and gaining a clear understanding of their consequences in terms of possible DNA sequence errors or chromatin alterations may eventually lead to novel interventions to delay cellular degeneration and death. Key questions that need to be addressed involve the type of (epi)genomic changes that occur during aging, their organ and tissue distribution, their effect on cell and tissue functioning and their relation to age-related disease. This symposium will focus on the use of novel, high-throughput approaches for studying changes in the genome and epigenome and their possible consequences during aging in humans and model organisms.

RELOCALIZATION OF CHROMATIN MODIFIERS AS A CAUSE OF AGE-RELATED CHANGES IN GENOME STABILITY AND GENE EXPRESSION

D.A. Sinclair, P. Oberdoerffer, *Pathology, Harvard Medical School, Boston, Massachusetts*

For decades, gene expression patterns have been known to change with age. Why certain genes are selectively altered and what consequences this has for the organism is unknown. Work by the Vijg lab indicates that changes in the expression of mammalian genes with age may be due to oxidative stress-induced DNA damage. In yeast and simple metazoans, the SIR2 gene family (aka the sirtuins) extend lifespan by mechanisms that ostensibly overlap with caloric restriction, although this is debated. We find that oxidative stress results in a loss of silencing at loci that are repressed by Sir2. Paralleling yeast Sir2, the murine orthologue SIRT1 participates in the silencing of repetitive (pericentromeric) and promoter DNA and that this silencing is reduced upon exposure to DNA damage. We have mapped promoters that SIRT1 binds to and observe a redistribution of SIRT1 upon exposure to oxidative stress that correlates with alterations in the expression of SIRT1-target genes in damaged cells and in the aging mouse brain. Following DNA damage, SIRT1 is recruited to sites of damaged DNA to facilitate repair and recruit key repair proteins including rad51 and Nbs1. Consistent with *in vitro* data, increasing SIRT1 expression in transgenic mice suppresses changes in SIRT1-regulated genes in the aging brain and promotes survival in a mouse model of genomic instability and cancer. The data support the idea that DNA damage-induced redistribution of chromatin modifiers (RCM) may underlie gene expression changes that characterize eukaryotic aging. This work was supported by NIA, The Glenn Foundation and the Ellison Medical Foundation.

DNA METHYLATION IN AGING AND CANCER

J. Issa, *University of Texas MD Anderson Cancer Center, Houston, Texas*

DNA methylation of CpG island associated promoters is a mechanism of gene inactivation during embryonic development that is physiologically involved in X-inactivation, imprinting and germ-cell restricted expression. In adult cells, this mediator of epigenetic silencing has been shown to be intimately involved in the development of neoplasia through acquired DNA methylation of tumor-suppressor (and other) genes. In the GI tract, we have shown that aberrant CpG island methylation can be acquired in normal-appearing tissues as a function of age and we have proposed that this molecular event predisposes cells to neoplastic transformation, implying that the earliest steps in sporadic carcinogen-

esis could be epigenetic. There is now significant support for this hypothesis from animal studies, and from the observation of epigenetic field defects surrounding many epithelial malignancies. Recent work will be discussed showing that, in humans, epigenetic variation in the GI tract is related to age more than any other factor such as diet or folate. Global methylation profiling reveals that age-acquired methylation is also common in mice proving that it reflects physiologic age rather than time-dependent events. The process is exquisitely tissue-specific and likely results from interplay between a genome architecture that predisposes to methylation, tissue specific factors that protect against methylation and extrinsic/exposure/stochastic factors that alter the balance, resulting in epigenetic variation in a genetically homogeneous population. It is likely that age-related promoter methylation alters cellular physiology and contributes to age-acquired diseases though this needs to be rigorously shown in experimental and human models. The availability of drug intervention to modify DNA methylation and histone modifications also raises the prospect of epigenetic based prevention for age-related diseases.

LIFE, DEATH, AND TRANSFORMATION: EPIGENETIC AND ARCHITECTURAL REGULATION

M.G. Rosenfeld², M.D. Cardamone², P. Cook², I. Garcia-Bassets², Q. Hu², K. Hutt², B. Ju², Y. Kwon¹, *1. Medicine, UCSD, La Jolla, California, 2. HHMI/UCSD, La Jolla, California*

While the role of liganded nuclear receptors in mediating coactivator/corepressor exchange is well established, nuclear motor-dependent regulation of chromosomal organization in the three-dimensional space of the nucleus to diverse signaling events is emerging as a major parallel strategy to achieve integrated transcriptional responses revealing a key role for the modulation of nuclear architecture in orchestrating regulated gene expression programs in the mammalian nucleus, using previously unsuspected classes of sensor molecules. Thus, a network of covalent modifications of coactivators/corepressors modulate general and gene-specific nuclear/chromatin architecture to regulate developmental, homeostatic, and disease gene expression programs. Chromosomal translocations and their corresponding gene fusions play important roles in many diseases of developmental and in initial steps in cancers, which is particularly well-established for leukemias, but now identified as a more general event in solid tumors. The molecular basis for these tumor translocation events is quite incompletely understood, although a prevailing model instituted by events in yeast, is that random translocations are selected by conferring growth advantage. A model for the molecular logic underlying tumor translocation events will be presented.

GENETIC VARIATION IN GENOME MAINTENANCE AND AGING

Y. Suh, *Albert Einstein College of Medicine, New York, New York*

Aging is a major risk factor for the most common human diseases and one of the most complex phenotypes that we know. The identification of genetic variation and their potential functional impact on aging-related phenotypes will be important in assessing genetic components of aging, including exceptionally healthy aging, ultimately contributing to our understanding of functional diversity in aging human populations. We hypothesize that genetic variation at loci involved in genome maintenance can be related to individual differences in the rate and severity of aging. We are conducting a systematic multidisciplinary study to discover "functional gene SNP haplotypes", i.e., allelic variation caused by multiple SNPs in the same gene, among over a hundred candidate genes acting in genome maintenance pathways. These candidate genes include all DNA repair genes in which heritable mutations have been found associated with accelerated aging in humans or mice as well as genes interacting with these key genes and other genes acting in the same pathway. To ascertain the functional relevance of observed positive associations, candidate gene-SNP haplotypes are screened for var-

ious parameters of cellular fitness in short-term cell culture studies. Functionally relevant gene variants will then be further studied for their in vivo effect during aging by modeling them in mouse. We will present an example of gene variants related to a major aging-related disease.

SESSION 1080 (SYMPOSIUM)

BRIDGING THE NEXUS OF AGING AND DISABILITY RESEARCH: CHALLENGES AND SOLUTIONS FOR IMPROVING HEALTH, EMPLOYMENT, AND INDEPENDENT LIVING

Chair: I.R. Molton, *Rehabilitation Medicine, University of Washington, Seattle, Washington*

Discussant: A. Jette, *Boston University, Boston, Massachusetts*

As a result of major advances in medical knowledge and rehabilitation practice over the past several decades, adults with long-term physical disabilities acquired early in the lifecycle are living well into older age. Similarly, increases in longevity in the general population mean a greater incidence of new-onset disabilities in older adults. This combined “wave” of individuals aging with and aging into physical disability represents a major challenge to researchers, health care practitioners, and policymakers. To meet this challenge, an interdisciplinary “bridging” perspective that spans the fields of disability and aging through the social model of disability will be of key importance. This symposium will highlight the importance of cross-collaboration between aging and disability research and practice networks, and will discuss the unique psychosocial, medical, and economic needs of middle-aged and older adults with physical disabilities. Dr.’s Campbell and Putnam will provide an overview of the important demographic, conceptual, and policy issues associated with the nexus of aging and disability, and will highlight the commonalities and differences experienced by those aging with a disability versus those aging into disability for the first time in mid- to later- life. Dr. Molton will provide an overview of the nature and course of prevalent secondary conditions, including pain, in middle-aged and older adults living with long-term disabilities, and will also discuss some statistical and methodological challenges in separating the effects of chronological age from disability duration. Finally, Dr. Johnson will present on factors associated with maintaining employment, transitioning to retirement, and maximizing independence and community participation in persons aging with spinal cord injury and other disabilities.

NATURE AND COURSE OF SECONDARY CONDITIONS IN MIDDLE-AGED AND OLDER ADULTS LIVING WITH PHYSICAL DISABILITY

I.R. Molton, *Rehabilitation Medicine, University of Washington, Seattle, Washington*

Physical disabilities such as spinal cord injury, multiple sclerosis, and limb amputation are often associated with equally disabling secondary conditions, including problems with chronic pain, nausea, difficulties with gait and balance, and psychological comorbidities. Increasing age is a known risk factor for physical disability, and with increases in longevity more older adults are living with both long-term and recently acquired physical disabilities. In this presentation, the author will review what is known regarding the expected nature, course and psychosocial impact of secondary conditions across the lifespan, with an emphasis on chronic pain and psychological functioning. The author will also highlight the importance of methodological consistency in advancing the field of aging and disability, and will explore some important statistical considerations present in effectively isolating the effects of “aging” variables (such as chronological age, time with disability, and time at disability onset) in cross-sectional analyses.

EMPLOYMENT AND DISABILITY

K. Johnson, *Department of Rehabilitation Medicine, University of Washington, Seattle, Washington*

People with spinal cord injuries (SCI), multiple sclerosis (MS) and other disabilities are employed at a much lower rate than the general population; however, most would prefer to work and employment status is associated with higher reported quality of life and better mental and physical health. Functional limitations alone cannot account for the low rate of employment. Rather, issues related to health care insurance, subsidy, and other socio-economic variables play a significant role. Of those who do enter employment, there is evidence that they may leave employment because of premature aging and loss of function associated with disability. Health care workers may assist with problem-solving barriers to employment, and assist people who are working make informed decisions about early retirement as their function decreases. Referrals for vocational rehabilitation and/or benefit planning may be critical. Supported by: The contents of this abstract were developed under a grant from the Department of Education, NIDRR grant number H133B031129. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

BRIDGING THE AGING AND DISABILITY NEXUS: DEMOGRAPHIC, CONCEPTUAL AND POLICY PERSPECTIVES

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Dramatic increases in longevity experienced by middle-aged and older adults with long-term and newly acquired disabilities highlight the need to better understand the demographic, conceptual and policy issues that characterize the nexus of aging and disability. To respond to this need, the authors draw on the social model of disability and the International Classification of Functioning, Health and Disability (the ICF) as a bridging framework and present national data documenting similarities and differences in key indicators of disability, health, functional status, employment, utilization of assistive technologies, and preferences for independent living for individuals aging with and aging into disability in mid- to later-life. The authors also describe the pros and cons of recent state and federal policy developments aimed at bridging the traditional gaps between aging and disability funding and service deliver streams. Conclusions offered identify next steps in advancing the nexus of aging and disability research agenda.

SESSION 1085 (SYMPOSIUM)

CREATIVE STRATEGIES FOR HEALTHY AGING IN MINORITY AND UNDERSERVED POPULATIONS

Chair: D. Yee-Melichar, *Gerontology Program, San Francisco State University, San Francisco, California*

Discussant: K.E. Whitfield, *Duke University, Durham, North Carolina*

This innovative symposium addresses the important conference theme of Creative Approaches to Healthy Aging. It features a distinguished panel of speakers who will discuss contemporary issues in minority and underserved populations. Sara E. Espinoza, M.D., Inkyung Jung, Ph.D., and Helen P. Hazuda, Ph.D. (University of Texas Health Science Center at San Antonio) will discuss targets for the promotion of healthy aging in Mexican American older adults from the San Antonio longitudinal study of aging. Participants will learn about a health promotion intervention described as the Healthy Active Lifestyle Program for low income Filipino elders from Melen McBride, Ph.D., RN, GSAF (Stanford Geriatric Education Center) and Susan Dilkes, MBA (Filipino American Service Group Incorporated). Yunju Nam, Ph.D. and Hyo Jin Jung, MSW (George Warren Brown School of Social Work,

Washington University in Saint Louis) will share information on the effects of noncitizen eligibility restriction on older immigrants' Medicaid participation and health insurance coverage after welfare reform, using data from the Current Population Study. Participants will learn about the measurement of cancer literacy in Filipino and Mexican American immigrant women from Barbara W.K. Yee (University of Hawai'i at Manoa) and Lydia P. Buki (University of Illinois). Darlene Yee-Melichar, EdD, chair of the GSA Task Force on Minority Issues in Gerontology and former chair of the DHHS-OWH Minority Women's Health Panel of Experts, will serve as moderator. Keith Whitfield, PhD, member of the National Board of Scientific Counselors, National Institute on Aging and former chair of the GSA Task Force on Minority Issues in Gerontology, will serve as discussant. Sponsored by the GSA Task Force on Minority Issues in Gerontology.

WELFARE REFORM AND OLDER IMMIGRANTS' HEALTH INSURANCE COVERAGE

Y. Nam, H. Jung, *George Warren Brown School of Social Work, Washington University in Saint Louis, Saint Louis, Missouri*

Background: The welfare reform bill of 1996 severely constrained noncitizen's access to Medicaid by imposing restrictive eligibility rules. The bill prohibits states from providing federally-funded Medicaid benefits to post-enactment immigrants (noncitizens who immigrated after welfare reform) for their first five years in the country, while giving state governments flexibility in determining Medicaid eligibility of other noncitizens. This study investigates changes in Medicaid and health insurance coverage among older immigrants after welfare reform. **Methods:** This study conducts secondary data analyses using individual level data from the Current Population Survey and state-level Medicaid policy data. This study uses the CPS data from 1994 to 1996 (pre-welfare reform period) and from 2003 to 2008 (post-welfare reform period). This study employs differences-in-differences analysis that compares changes in Medicaid and health insurance coverage among older immigrants between those living in generous states (providing state-funded Medicaid to ineligible noncitizens) and those living in non-generous states. **Results:** Multivariate analyses show that older immigrants living in generous states are significantly more likely to participate in Medicaid and to have health insurance than those living in non-generous states. Naturalized citizens' Medicaid coverage is significantly higher than those living in generous states than those in non-generous states after welfare reform. Health insurance coverage is significantly higher among noncitizen living in generous states in comparison with those living in non-generous states. **Conclusions:** The results suggest that Medicaid eligibility rules play important roles in older immigrants' health insurance coverage. It is recommended to restore noncitizens' Medicaid eligibility to provide health insurance coverage to vulnerable noncitizens.

MEASUREMENT OF CANCER LITERACY IN FILIPINO AND MEXICAN AMERICAN IMMIGRANT WOMEN

B. Yee¹, L. Buki², 1. *University of Hawai'i at Manoa, Manoa, Hawaii*, 2. *University of Illinois, Chicago, Illinois*

Health literacy has emerged as an important construct and mediator of health outcomes. Four components (i.e., cultural and conceptual knowledge, listening and speaking (oral literacy), writing and reading (print literacy), and numeracy contribute to health outcomes (IOM, 2003). There is a lack of consensus regarding the most appropriate ways to measure these components of health literacy and their relative contributions to health outcomes. In the context of documented health disparities in breast and cervical cancer among immigrant populations (IOM, 2002), it is surprising that there is a relative absence of measurement tools to assess cancer literacy in low literate and limited English populations. This presentation will examine the processes we undertook to develop a measure of cultural and conceptual knowledge of breast and cervical cancer for Filipina and Mexican American immigrant women. The study consisted of three phases with Mexican and Filipino

women who were 39 to 88 years of age and had completed 0 to 12th grade educational levels. * Research project entitled "Culture and Cancer Literacy among Immigrant Women" was supported by the National Cancer Institute, R03CA115795 (Lydia Buki, PI)

HEALTH PROMOTION INTERVENTION FOR LOW INCOME FILIPINO ELDERS

M. McBride, *Stanford Geriatric Education Center, Stanford University, Stanford, California*

Low-income older Filipino immigrants in a West Coast metropolitan area continue to experience barriers to health care access and culturally relevant health information. A community-based, non-profit organization initiated the Active Lifestyle Program (HALP), a health promotion program in response to findings of a local health screening in which 43% (N=127) had elevated blood glucose that was undiagnosed. The agency developed a culturally oriented train-the-trainer model on nutrition and fitness exercise with Filipino martial arts (KALI) for 23 Senior Peer Educators recruited from nine community groups to educate peers on nutrition and exercise. Post-training results: 60% had decreased blood pressure; 52% had lower heart rate from baseline; 50% maintained normal body mass index (BMI); and 35% lost a total of 50 lbs. Outreach activities resulted in 133 educational sessions to 340 Filipino elders. Currently, older Filipinos with diabetes and the 50+ baby boomers are using this model.

TARGETS FOR THE PROMOTION OF HEALTHY AGING IN MEXICAN AMERICAN OLDER ADULTS: RESULTS FROM THE SAN ANTONIO LONGITUDINAL STUDY OF AGING

S. Espinoza, H. Hazuda, I. Jung, *University of Texas Health Science Center at San Antonio, San Antonio, Texas*

Background: In order to identify targets for clinical intervention to promote healthy aging in Mexican Americans (MAs) as they age, we examined the contribution of frailty, diabetes, and cardiovascular comorbidity to survival in older MAs. **Methods:** Subjects were 348 MA participants in the San Antonio Longitudinal Study of Aging aged 65-74 at baseline and followed for an average of 9.9 years. The contribution of frailty, diabetes, and cardiovascular comorbidity to mortality was calculated using a Cox proportional hazards model, adjusting for sociodemographic factors. **Results:** The hazard ratios (HR) for mortality were similar for frailty (HR=1.8, 95%CI:1.1-2.95) and diabetes (HR=1.51, 95%CI:1.01-2.26). The HR for cardiovascular comorbidity was not significant (HR=1.2, 95%CI:0.8-1.81). **Conclusions:** Caring for MAs as they age requires development of creative strategies for prevention and management of both frailty and diabetes as these conditions are significant contributors to decreased survival and undermine healthy aging.

SESSION 1090 (SYMPOSIUM)

DEMENTIA AND THE LIVED EXPERIENCE OF CAREGIVING AMONG LATINO FAMILIES: QUALITATIVE PERSPECTIVES ON SUFFERING AND RESILIENCE IN CHALLENGING SITUATIONS

Chair: L. Hinton, *Psychiatry, U.C. Davis, Sacramento, California*

Discussant: M. Iris, *Council for Jewish Elderly, Chicago, Illinois*

As the number of older Latinos with Alzheimer's disease and other degenerative dementias continues to grow, there is a great need to better understand how their families experience their roles as caregivers as the basis for more effective and cultural-tailored outreach and interventions. Through its focus on meanings and behaviors in context, qualitative research has the potential to broaden and deepen our understanding of these issues and to complement quantitative research. The presentations in this symposium are all based on qualitative methods and draw attention to the aspects of caregiving that Latino family members find particularly challenging as well as their management strategies. More specifically, these presentations highlight difficult behav-

ioral symptoms and their impact on the family (Jimenez), the importance of interpersonal violence and aggression (Hinton), meaning-making in the face of loss (Flores), and coping strategies for managing daily challenges (Mendez-Luck). Together, these papers highlight both the sources of suffering and sites of resilience in the lives of Latino caregivers. The implications of this research for both clinical practice and theory will be addressed.

SU HISTORIA ES MI HISTORIA (HER STORY IS MY STORY): NARRATIVES OF SPOUSES OF LATINA/OS WITH DEMENTIA

Y. Flores, L. Hinton, *Psychiatry, U.C. Davis, Sacramento, California*

This paper draws on qualitative interviews of Latina and Latino caregivers to offer an analysis of the role of migration and gender on the ethics of care of spousal caregivers of Latinos diagnosed with dementing illnesses. I examine how immigrant male and female caregivers give meaning to the experience of caring for spouses whose capacities are waning and whose illness at times they do not understand. These poignant narratives illuminate potential sites of intervention to lessen the stress of caregiving

LATINO FAMILIES RESPONSE TO NEUROPSYCHIATRIC DISTURBANCES IN ALZHEIMER'S DISEASE

D.E. Jimenez¹, L. Hinton², *1. Dartmouth Medical School, Lebanon, New Hampshire, 2. University of California, Davis Medical School, Sacramento, California*

Neuropsychiatric disturbances in dementia can complicate the caregiving process by increased disability, health care costs, and caregiver burden. Since Latinos tend to exhibit a greater number of behavioral problems than African-Americans and Caucasians, it is increasingly important to understand how families adapt and cope with behavioral problems, and how these coping strategies affect the care recipient. In-depth interviews were conducted with 45 Latino caregivers who were caring for a family member with dementia. Many of these caregivers stated that family and friends have distanced themselves from the care recipient as a result of behavioral problems. Also, neuropsychiatric disturbances tended to cause shame and embarrassment leading the caregiver to keep the care recipient isolated from family and friends. This isolation can have deleterious effects on the caregiver as well as the care recipient since the Latino culture is known for large social networks and has familismo as a core cultural value.

OVERCOMING A BAD DAY: A QUALITATIVE LOOK INTO THE ALZHEIMER'S CAREGIVING EXPERIENCE OF MEXICAN-AMERICAN WOMEN LIVING IN EAST LOS ANGELES

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Because the Latino population is relative young and the risk of acquiring Alzheimer's disease increases with age, greater numbers of Latino caregivers will eventually find themselves caring for an elderly loved one with the disease. Yet the current literature on Alzheimer's caregiving among Latinos is limited, requiring further research. We conducted one-time qualitative interviews with sixteen Mexican-American female caregivers about their experiences caring for an elderly relative, nine of whom had Alzheimer's disease. Eleven caregivers described caregiving as "tiring," "wearing," or "hard;" almost half were caring for relatives with Alzheimer's disease. Six of eleven women who described caregiving in these terms reported suffering from stress, insomnia, nervousness, migraines, and/or depression. We also found that Alzheimer's caregivers faced unique challenges, including changes in care recipients' personalities and behaviors over time. However, these

caregivers viewed support groups and home aide services as critical to their successful coping and longevity as caregivers.

UNDERSTANDING AGGRESSIVE BEHAVIORS IN SOCIOCULTURAL CONTEXT: AN ETHNOGRAPHIC STUDY OF LATINO'S FAMILY CAREGIVERS AND PERSONS WITH DEMENTIA

L. Hinton¹, J. Barker², *1. Psychiatry, U.C. Davis, Sacramento, California, 2. University of California, San Francisco, San Francisco, California*

This paper examines the phenomenology of aggressive behaviors as they emerged in social interactions between Latino elderly with dementia and their family caregivers. This paper is based on data collected during 15 months of intensive ethnographic field work with five Latina women caring a family member with dementia. Aggressive behaviors were identified as an important concern by caregivers and were often triggered by escalating conflicts over issues such as dressing, going outside the home, or personal hygiene. Caregivers understood aggressive behaviors in ways that differed with respect to the degree of responsibility or control attributed to the person with dementia. The behavioral and affective responses of families to aggression also varied considerably, ranging from emotional warmth to criticism and threats. We draw upon the expressed emotion framework as a way of thinking about the role of culture and the variability observed in family patterns of response to aggressive behaviors

SESSION 1095 (SYMPOSIUM)

DIFFERENTIAL CHANGE IN HEALTH IN LATER LIFE

Chair: *I. Schöllgen, German Centre of Gerontology, Berlin, Germany*

Discussant: *J. Smith, University of Michigan, Institute for Social Research, Ann Arbor, Michigan*

In aging research, health trajectories are often described as a phenomenon of progressive decline with increasing age, neglecting the differential trajectories of different people and different time frames of change. In this symposium the role of psychological and sociological variables associated with mean levels and long- or short-term change in health will be discussed. The first two speakers deal with long-term change, using nationally representative datasets of middle-aged and older adults. Schöllgen, Huxhold, and Tesch-Römer investigate variations in physical, functional, and subjective health within and between socioeconomic status groups as well as the role of psychosocial resources in accounting for some of these variations. Quiñones and Liang examine ethnic variations in disease trajectories, finding that blacks and Mexican Americans have higher levels of disease and greater rates of accumulation over time than whites. The final two papers deal with short-term variability and extend the symposium to include mental health. Wolff, Brose, Schmiedek, and Lindenberger show that daily couplings between negative affect and health complaints are stronger in older adults with high social support. Finally, Montpetit, Deboeck, and Bergeman look at variability in negative affect across multiple timescales and explore the differential impact of dispositional resilience, coping style, and physical health on different features of these time series. Smith will serve as discussant. Her expertise in research on healthy aging as well as long- and short-term change will provide insights towards understanding the complexity of health change in later life.

VARIATIONS IN HEALTH WITHIN AND BETWEEN SOCIAL STATUS GROUPS: THE ROLE OF PSYCHOSOCIAL RESOURCES

I. Schöllgen, O. Huxhold, C. Tesch-Roemer, *German Centre of Gerontology, Berlin, Germany*

Groups with higher socio-economic status (SES) show better health than low SES groups. Current research has paid less attention to variations in health within status groups, although such heterogeneity con-

stitutes evidence of modifiability. This work addresses age differences in these variations and links them to interindividual differences in psychosocial resources. First cross-sectional analyses used data from 2,454 persons 40 years and older from the nationally representative German Ageing Survey. Applying multiple group structural equation modeling, it was demonstrated that, in midlife, the lower the SES the higher the within-group variance in physical, functional, and subjective health. Psychological resources accounted for some of this variability and were more strongly associated with health in low SES groups. Here, we extend the cross-sectional findings to longitudinal analyses spanning up to three waves of measurement and up to 12 years of time, also looking at differences in health change between the status groups.

CHANGES IN DISEASE TRAJECTORIES IN MIDDLE AND OLD AGE IN THE U.S.: ETHNIC VARIATIONS

A.R. Quinones, J. Liang, *University of Michigan, School of Public Health, Ann Arbor, Michigan*

Few studies examine ethnic variations in the trajectory of disease with nationally-representative longitudinal data. This research examines intrapersonal changes in disease among Americans over the age of 50 for a period up to 12 years. It focuses on how changes in reported burden of serious diseases as well as the specific diseases of hypertension, diabetes and stroke vary across whites, blacks and Mexican Americans. Data came from 17,517 respondents of the Health and Retirement Study (1995-2006) with up to six repeated observations. Serious disease burden was measured by an additive index including cancer, diabetes, heart disease, hypertension, and stroke. Hierarchical linear models were employed to analyze ethnic variations in temporal changes of disease burden, hypertension, diabetes and stroke, respectively. Consistent with our hypothesis, blacks and Mexicans have higher baseline levels of disease and greater rates of accumulation over time relative to whites.

SOCIAL SUPPORT AS A MODERATOR OF THE DAILY AFFECT-HEALTH RELATIONSHIP

J.K. Wolff¹, A. Brose¹, F. Schmiedek^{1,2}, U. Lindenberger¹, *1. Max-Planck-Institute for Human Development, Berlin, Germany, 2. Humboldt University Berlin, Berlin, Germany*

The link between affect and health is well documented in previous literature. The current study investigates adult age differences in daily couplings of affect and health. In addition, social support is introduced as a potential moderator of the affect-health relationship. The data is collected in the currently conducted follow-up of the COGITO study, in which two age groups (101 younger adults, 20-31 years, 103 older adults, 65-80 years) completed 100 daily sessions. In the COGITO follow-up participants take part in four weeks of daily assessments two years after finishing the COGITO study. Multilevel analyses show a coupling of daily negative affect and daily health complaints. Preliminary results suggest that older adults with high social support scores show a stronger association of negative affect and health pointing out a negative effect of social support. Further analyses will investigate if this is also true for different kinds of social support.

OVERLAPPING SOURCES OF VARIABILITY IN NEGATIVE AFFECT: RELATIONSHIPS WITH COPING AND PHYSICAL HEALTH

M. Montpetit¹, P.R. Deboeck², C. Bergeman³, *1. Psychology, Miami University, Oxford, Ohio, 2. University of Kansas, Lawrence, Kansas, 3. University of Notre Dame, Notre Dame, Indiana*

The current study uses Derivative Variability Analysis to examine intraindividual variability in negative affect for 300 individuals from the Notre Dame Study of Health and Well-being. The differential impact of coping style and physical health on different features of these time series was investigated. Results suggest that worse self-reported health was positively associated with variability in observed scores and in rates

of change. Conversely, the use of proactive coping techniques was negatively related both to variability within the space of a week, and to variability in rates of change. Elders rating their physical health more poorly evinced greater emotional lability, and more variability in their rates of change. Perhaps physical health difficulties tax elders' reserve capacities, leaving them more vulnerable to the effects of everyday stressors. Similarly, proactive coping might help elders weather life's vicissitudes, allowing for less lability in negative emotions, and more consistent rates of change.

SESSION 1100 (POSTER)

HOUSING, NURSING HOMES, AND RESIDENTIAL CARE

ASSISTED LIVING AT SEA: OPINIONS FOR SENIOR CRUISERS

D. Parker Oliver, D.B. Oliver, *Family and Community Medicine, University of Missouri, Columbia, Missouri*

The purpose of this study was to explore the perceptions and feasibility of seniors residing on cruise ships as an alternative to assisted living facilities. The study used a mixed-methods approach with qualitative observations informing survey results on a 14-day Asian cruise and a 16 day South American cruise. A semi-structured questionnaire was developed by the authors, and extensive field notes and photographs were used to record observations. Lack of accessibility of cruise ship facilities was the most cited challenge for senior cruisers, followed by frustrations with waiting in lines and rules and regulations. Despite these challenges, nearly one-half expressed interest in living permanently on a cruise ship as they age. To meet the needs of an older and frailer residential population, cruise ships will need to assure that physical and social environments are appropriate. Recruitment and special training of employees will be essential.

ASSISTED LIVING ADMINISTRATORS' PERSPECTIVES ON TRANSITIONING THOSE WITH DEMENTIA TO MEMORY CARE

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Individuals with Alzheimer's disease or related disorders can benefit from residing in an assisted living facility (ALF). Their families can also benefit. Of ALF residents, 23%-42% have moderate-to-severe dementia. As cognitive function declines, an ALF may no longer be able to accommodate the resident. Our study examines the process of transitioning residents from ALFs to special units for the care of those with severe cognitive impairment, often called memory care units (MCUs). We examine the process from the perspective of three different ALF organizational models: free-standing ALFs, ALFs with MCUs, and ALFs in continuing care retirement communities (CCRCs). We conducted in-depth interviews with 37 ALF administrators of these ALF types. Administrators in free-standing ALFs were notably more likely to discuss transfer policies at admission. CCRCs with MCUs were more likely to make multidisciplinary decisions. In ALFs with MCUs, typically the administrator and the director of nursing or resident care coordinator decided that a transition was required. In all ALFs, challenges included family resistance and denial of deficits, although there was notably less resistance in free-standing ALFs. CCRCs were much less likely than ALFs with MCUs to have trial MCU admissions. To reduce family resistance to MCU transfers, administrators in all ALFs need to maintain ongoing dialogue with family, discuss transfers at admission, conduct periodic resident reassessments, and provide regular opportunities for families to learn about dementia progression and memory care.

CAREWORKER'S NERVOUS FACTORS ON END-OF-LIFE CARE IN GROUP HOME

H. Shiotani, M. Teranishi, *Social Welfare, Hiroshima International University, Higashi-Hiroshima, Japan*

BACKGROUND: The number of dementia patients receiving end-of-life care in "Group Home (GH)" is increasing; GH is a kind of nursing home with 9 residents per unit for dementia patients in Japan. **OBJECTIVE:** To understand careworker's nervous factors on the end-of-life care in GH. **METHODS:** We sent out questionnaires to chief careworkers (200 persons) in GH, Hiroshima prefecture; the collection rate was 35.5% (n = 71). The results were analyzed by multivariate analysis - quantification method. **RESULTS:** Three important factors emerged. (a) Understaffing of careworkers: On average only one staff cares 9 residents in night shift so that they can not receive good care service especially for emergency. (b) Poor collaboration in medical services: GH has no full-time medical staffs. Residents receive medical care from regional medical services, i.e. visiting nurses and doctors. The collaboration between the careworkers and the medical staffs was poor and needs improvement. (c) Insufficient medical knowledge of careworkers: Careworkers have limited course hours on medicines in the training school and their medical knowledge is insufficient. **CONCLUSION:** This study suggests that increasing in the number of careworkers, promoting in collaborative relationships between careworkers and medical staffs, and enhanced training about hospice care in GH are required to improve the present careworker's nervous factors.

A QUALITATIVE STUDY ON THE ATTRACTIVE POINTS OF WORKING AS A PROFESSIONAL CARE-WORKER IN JAPAN

A. Ohashi¹, K. Abe², *1. Chubu Gakuin University, Gifu, Japan, 2. National Center for Geriatrics and Gerontology, Aichi, Japan*

Objective: Recently, the number of people aiming to become professional care-workers has decreased substantially in Japan. Reasons for this include the fact that care-working in Japan are low-paying and stressful working structure which includes night shifts and interpersonal relationships. The aim of this study is to conduct exploratory analysis of the attractive points of working as a professional care-worker in Japan. **Method:** We conducted semi-structured interviews of 23 employees working in two nursing homes in the Tokai area. The questions were "What is the attractive point to you about this work before you started working?" and "How did you newly perceive the attractive point of this work after you started working?" **Results:** Most extracted attractive point of the work before they got their jobs is "worthwhile job." Second attractive points were "the qualification and employment structure" and "the job of human supporting." They newly perceived to be attractive point after they got their jobs, the most extracted point was "the pleasure of the work." The second was "being appreciated by older people." **Discussion:** Most of the points revealed in this study were identical to the general image of care-worker in Japan. It is clear that most employees who are actually working as care-worker have not been selecting their occupation based on special experiences or achievements. Furthermore, the greatest number of respondents said that the attractive point of the work was "being appreciated" which suggests that positive feedback to the care-worker is currently playing an important role for them.

PHYSICIAN PERSPECTIVES ON FALLS PREVENTION AND MONITORING IN ASSISTED LIVING COMMUNITIES

K. Nyrop, S. Zimmerman, P. Sloane, *UNC at Chapel Hill, Chapel Hill, North Carolina*

Falls contribute to increased mortality and morbidity as well as reduced functioning and independence among the frail and elderly in long-term care. **Aims:** This study identified physician perspectives on their role and the role of assisted living (AL) communities regarding: (1) assessing residents for falls risk, and (2) reviewing medications for potential side effects related to falls. **Methods:** Physicians identified by four AL communities as primary care providers (PCP) for their resi-

dents completed a questionnaire on falls prevention and monitoring in AL. Theory of Planned Behavior constructs were used to elicit physician attitudes, expectations and perceived constraints on conducting fall risk assessments (FRAs) and medication reviews (MRs). **Results:** 34 physicians completed the survey; 59% male, mean age 52 (SD 11.43). Respondents reported conducting FRAs for 46% and MRs for 71% of their AL patients. Respondents strongly agree AL patients should be assessed for falls risk (94%), and that knowing a patient's falls risk will result in specific actions by the PCP (71%) or AL community (50%). 53% strongly agree PCPs have the expertise to do FRAs; only 25% strongly agree AL communities have this expertise. 47% strongly agree appropriate alternatives could be identified and prescribed for medications with potential side effects related to falls. **Conclusion:** Despite strong support for FRA, a minority of physicians conduct them and believe AL staff are capable of doing them. There is need for PCPs to assume more ownership of this activity and/or to better equip AL staff to do so.

INFLUENCES ON NEW SENIOR HOUSING RESIDENT ADAPTATION AND WELL-BEING: RULES, MANAGEMENT, AND RESIDENT DEATH

H. Ewen, J. Chahal, *Sociology and Gerontology, Miami University, Oxford, Ohio*

Physiological mechanisms provide our bodies with the ability to mobilize in the face of stressors. In the short term, such mechanisms are healthy, adaptive responses necessary for psychological and physical well-being. Prolonged situations of stress or situations for which we are ill prepared can lead to excessive reactivity and exacerbate or hasten onset of co-morbid health conditions. This longitudinal study of women relocating to senior housing examines the stresses associated with adapting to a new living environment and the psychological and physiological reactions through self-report measures as well as salivary cortisol sampling over a six month time period. Many residents were able to anticipate the stresses of the new environment, but many were unprepared for the death of other residents, the conflicting roles of the facility management, and unwritten social rules within the facility. Self-report measures of stress and well-being were highly correlated with cortisol reactivity. Death of other residents and the management's handling of resident death had a great impact on the stress reactions of new residents.

HEALTH CARE DELIVERY IN ASSISTED LIVING: THE EMERGING ROLE OF HEALTH CARE SUPERVISORS

B. Harris-Wallace¹, J. Schumacher¹, S. Zimmerman², P. Sloane², J.K. Eckert¹, R. Perez¹, P.J. Doyle¹, C. Mitchell², *1. University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina - Chapel Hill, Chapel Hill, North Carolina*

Assisted living (AL) communities provide a supportive living environment for up to 1 million of our nation's older adults. With an average age of 85, these AL residents have a range of health conditions and needs for which AL settings must provide some level of care and monitoring. In this context, the role of a health care intermediary has emerged in AL. This person, whom we define as the Health Care Supervisor (HCS), is the AL staff member responsible for coordinating and supervising the healthcare provision and monitoring within the AL setting. This poster reports on structured interview data from an NIA-funded study that examines the HCS and his/her role in AL. In terms of education and credentials, preliminary analysis suggest just 50% of HCSs have nursing degrees (RN/LPN) while some serving in this role may have as little as a high school diploma. Additionally, many of HCSs report serving dual roles, including being a direct care worker (DCW) for residents as well as simultaneously being responsible for managing the overall health care delivery and monitoring issues across all of the AL residents. Conclusions drawn from the research are designed to inform a range of stakeholders including AL organizations, HCSs,

healthcare providers, and policy makers/regulators focusing on the current state, organization, and delivery of health care in AL settings.

CULTURE CHANGE MODELS AND RESIDENT-SPECIFIC OUTCOMES IN LONG-TERM CARE

N. Hill, P. Milone-Nuzzo, A.M. Kolanowski, *The Pennsylvania State University, University Park, Pennsylvania*

The traditional nursing home model has been challenged in recent years as an emphasis is placed on changing the culture of long-term care facilities. Culture change models claim to improve resident outcomes through the transformation of facilities from institutional environments into homes that recognize residents as individuals; however, a critical appraisal of the scientific evidence regarding benefits to residents has not been conducted. This integrated literature review explored research conducted on the effects of culture change model implementation, with a focus on resident-specific outcomes. An electronic search of CINAHL and PubMed was conducted, along with a subsequent search of relevant articles' reference lists and websites specific to the culture change models identified. Models selected for inclusion based on available research were the Eden Alternative, the Green House, Wellspring, and Resident-Centered Care. Findings related to resident-specific outcomes were compared and synthesized. Studies were classified according to level of evidence and an overall grade of the available evidence was determined. Evaluation of the literature indicates that results are conflicting and limited, although some evidence exists to support improvements in resident psychosocial outcomes after culture change model implementation. The overall grade of the evidence is quite low, a 'D', or the lowest rating by the latest SIGN recommendations. Future research that uses strong study designs, appropriate outcome measures, and longitudinal measurements is necessary to support the use of culture change models based on resident outcomes.

OLDER AND YOUNGER ADULTS PERCEPTIONS OF "SMART" FURNITURE

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'Smart furniture' is furniture that employs user-centered design principles and computer-aided assistive technologies. 'Smart furniture' might help older adults adapt to self-care difficulties and encourage aging-in-place. This study assessed 36 older adults' and 36 university students' ideas about 'smart furniture' through structured interviews. Questions asked about their potential needs and preferences based on hypothetical scenarios in which they would have limited mobility or independence. Additionally, participants were shown pictures of prototypes for a 'smart' nightstand. Then they were asked for their opinions on the functions, usability, and design of the furniture. Results show that both groups would find 'smart' furniture useful in their own homes. These findings suggest both age groups are accepting of 'smart' furniture but express different preferences and needs. More study is necessary to further inform the future designs of 'smart' furniture.

THE RELATIONSHIP OF HEALTH, HOUSING, AND COMMUNITY FOR AGING ADULTS

L. Severson, C. Cook, M. Yearn, *Iowa State University, Ames, Iowa*

Housing accessibility and community livability are essential to healthy aging. Increases in the elderly population, coupled with the desire to age in place, requires additional research to understand what is needed to keep elders healthy, safe, and independent for as long as possible. The purpose of this study was to examine the relationship between health and home accessibility, as well as health and community livability to better understand the implications for those who age-in-place. Preliminary analyses were performed on a subsample of 1,134 individuals (55.4% male, 44.6% female) aged 65 and older from the 2005 Iowa Family Survey. Over 75% of respondents lived in rural areas. Partici-

pants were asked whether accessible features were present in their home, such as a bedroom and bathroom on the first floor, and handrails on the stairs. They were also asked to rate their community on items ranging from transportation to crime and safety. A small but significant relationship ($r = -.10$, $p < .01$) was found between health and home accessibility features. Those with poorer health had more accessible features in their homes, suggesting that as health worsens people include more accessibility features in their homes. Conversely, those with more livable features in their community had better health ($r = .12$, $p < .01$). The analyses highlight the importance of creating and/or maintaining a barrier-free environment and livable community for aging adults. Future analyses will examine the role of housing accessibility and community livability characteristics in predicting health and life satisfaction among aging adults.

CONTENTS OF NIGHTSTANDS AMONG OLDER RESIDENTS OF SKILLED NURSING FACILITIES

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Furniture available to residents of Skilled Nursing Facilities (SNFs) is extraordinarily limited. One of the most frequently used pieces of furniture is the bedside table or nightstand. To begin to improve nightstand design, this study sought to evaluate the contents of nightstands for cognitively functional residents in SNFs. Locations, numbers and types of objects were recorded for 28 residents. Over 150 items were recorded and grouped into 25 categories. The most frequent categories were personal hygiene, clothing, food accessory, telephone, book / magazine, water pitcher, lotion, and tissue box. Most items were located on the top of the nightstand not in the drawers. We hypothesize that nightstand drawers may be functionally inaccessible for SNFs residents. The number of individuals having to reside in SNFs is rising. The nightstand is an important piece of furniture for these residents. Nightstand design needs to be re-thought based on user-centered principles.

CULTURE CHANGE IN THE NURSING HOME: THE RELATIONSHIP BETWEEN CULTURE CHANGE VALUES AND STAFF AFFECT

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While the "culture change" process may vary across facilities, there are "culture change" values common to most initiatives. These include person centered care, participative staff decision-making, team functioning, and family and resident inclusion in care planning. The present study examines which of these "culture change" variables are related to positive (joy and caring) and negative (anger and sadness) staff affect. The importance of workplace affect has been well documented (Barsade and Gibson, 2007), as affect has been associated with a variety of work performance outcomes. Within the nursing home setting, staff affect may be especially critical as the clients served actually reside within the staff's affective environment. Moreover, emotional contagion studies indicate that emotions transfer from one individual to another, having important implications concerning the impact of staff affect on resident well-being. In the present study, 216 staff members completed self-administered surveys. Surveys included a culture change values questionnaire, asking staff to rate the presence of culture change values on their community (nursing unit), as well as the affective culture (Barsade and O'Neil, 2009) on the community, the frequency with which other staff members display different types of affect (joy, happiness, anger and sadness). Bivariate analyses showed that affect was related to the majority of culture change values examined. However, regression analyses indicated that after controlling for trait positive and negative affect, the culture change variables most consistently related to affective culture were "resident-focused care" and "team-functioning". Implications

for the nursing home environment and culture change implementation will be discussed.

ADHERENCE RATES OF A HOME MODIFICATION PROGRAM TO SUPPORT AGING IN PLACE

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Home modifications such as grab bars or ramps can improve the functional ability of older adults. Adherence rates for home modifications and adaptive equipment have been reported to be as low as 45%. Low adherence has been attributed to participant's denial of need, cost, and social stigma. We evaluated adherence in a population of older adults who received home modifications as part of a tailored, client-centered intervention program. Older adults prioritized the problems with activities of daily living and instrumental activities of daily living to be addressed and participated in designing the barrier removal plan. A group of 58 older adults who received home modifications from 1999-2007 were contacted in 2008. The survey ascertained the individual's current use and perceived usefulness of the home modifications. Adherence rates were high for both groups even up to 9 years after implementation (mean adherence rate: 84%). Analyses revealed no significant difference in adherence rates between those who paid out of pocket and those who received them for free. A client-centered approach that addresses functional problems identified by participants demonstrates a high adherence rate.

BARRIERS TO PAIN MANAGEMENT FOR PERSONS WITH SEVERE DEMENTIA IN THE NURSING HOME

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There is evidence that staff knowledge and attitudes toward pain influence attitudes toward pain management. We conducted interviews at four nursing homes to better understand barriers and facilitators of quality pain management for persons with dementia. Semi-structured guide questions for interviews focused on staff understanding of pain issues, ability to identify pain, approaches to managing pain, barriers and facilitators to pain management efforts, and staff's own prioritization of pain as a quality of care issue. Registered nurses and licensed vocational nurses were interviewed separately using one-on-one interviews, and certified nursing assistants participated in focus-group interviews. Each level of staff was interviewed separately so as to promote unrestricted conversation and prevent fear of reprisal or disciplinary action. Qualitative analysis based on a grounded theory approach was used to identify consistent themes in the staff interviews. The most prevalent barriers to pain management included: staff's difficulty assessing pain in dementia, ascribing disruptive behavior to dementia rather than pain, fear of manipulation by residents, lack of pain education, inadequate time and manpower, excessive documentation, and inadequate staff communication. These barriers resulted in staff frustration in caring for residents with pain, particularly among those with dementia and disruptive behavior. Overall, our findings suggest that changes in educational training, staff organization and workflow are a necessary foundation for any pain management intervention to succeed in changing caregiver attitudes and practice patterns.

EVALUATING THE PREDICTIVE VALIDITY AND RELIABILITY OF TWO MEASURES OF PERSON-CENTERED CAREGIVING

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The goal of this study was to test the predictive validity and reliability of the Person-Centered Behavioral Inventory (PCBI) and the Global Behavior Scale (GBS). The PCBI measures nurse aides' specific behaviors (positive regard), and the GBS measures nurse aides' overall person-centered style (respecting residents' personhood). Scores nurse aides received based on these measures were correlated with scores residents with moderate stage dementia received using the Resistiveness to Care Scale (kicking, etc.). Based on the Need-Driven Dementia-Compromised Theory of Behavior, which views residents' disruptive behaviors as needs that have not been met, it was expected that aides' person-centered behaviors would be negatively correlated with residents' resistive behaviors. Seventy videotaped caregiving interactions created as part of an NIH funded project (Williams, Herman, Gajewski, & Wilson, 2009) were coded. Caregiving interactions averaged 4.5 minutes in length and involved residents from two nursing homes: inter-coder reliability was .85. As expected, nurse aides' use of person centered global behaviors marginally predicted ratings of residents' resistive behaviors ($r = -.22, p < .08$). Concurrent validity for the Global Behavior Scale and Person-Centered Behavioral Inventory was strong ($r = .70$) as was the internal consistency for the Global Behavior Scale ($\alpha = .95$). The findings indicate that "global" versus specific behavioral aspects of aides' caregiving were most strongly related to residents behaviors. Emergent findings showed the biggest predictors of residents' resistive behaviors were nurse aides' age and experience ($r = -.37$ and $-.26$, respectively). These findings could have implications for future research regarding nurse aides' use of person-centered caregiving skills.

AN INDIVIDUAL CARE CONFIRMATION BOARD (ICCB) FOR ELDERLY PEOPLE IN THE NURSING HOME THE EVALUATION OF CAREGIVERS WHICH USED INDIVIDUAL CARE CONFIRMATION BOARD (ICCB) TO THE NURSING HOME

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The aim of this study was to analyze the effect of care after using Individual Care Confirmation Board (ICCB) in the nursing home. Twenty one of caregivers answered to each self-report questionnaires concerning the effect of individual care for 44 elderly people using ICCB. The questionnaires were consisted of five items. (a) Take or not individual care? (b) Satisfied or not with individual care? (c) Accurate or not a method of indication for ICCB? (d) Changed or not for individual care? (e) Good or worse for individual care? And then, the answers for these each items were quantified to the each scores. There was positive correlation between mean age of caregivers and the scores of take individual care level ($r = 0.33, p < 0.05$). However there was negative correlation between mean age of caregivers and the scores of good for individual care level ($r = -0.30, p < 0.05$). The number of answers which a group of young aged caregivers (under 32 years old) evaluated for good were significantly much more than middle aged (over 32 years old) ($p < 0.01$). The number of answers which a group of middle-grade caregivers (working experience over 5 years) evaluated for take individual care were significantly much more than beginners' caregivers (under 5 years) ($p < 0.05$). The results of this investigation suggest that ICCB is useful to share the individual care with caregivers. we need to revise ICCB to improve the individual care system moreover.

DEFINING “FAMILY” IN SENIOR HOUSING AND LONG-TERM CARE SETTINGS: NEED FOR A PERSON-CENTRIC MODEL

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Research on the role of family members in the lives of older adults indicates that they are key to quality of life; in long-term care (LTC) settings, they also are key to quality care. However, much research defines “family” narrowly, focusing on the legality of relationships through birth and marriage and ignoring people (a) who do not have family, (b) who have created family to include friends and staff, (c) whose family may not be legally recognized, or (d) whose family may not be culturally/ethnically represented. Lacking is a clear, inclusive definition of “family” that incorporates individuals without traditional families, such as elders in the gay, lesbian, bisexual and transgender (GLBT) communities. Two sources of data inform this work. First, we analyzed 514 fieldnotes and 829 ethnographic interviews collected at 21 senior housing (independent living) and LTC settings (assisted living and nursing home) for three NIA studies to determine emic definitions of family as voiced by residents themselves. Second, we examined academic articles and policy reports on residents in senior housing and LTC to ascertain how the family has been defined by researchers and analysts. Combining these data sources, we critically examined the implications of exclusivity in terms of defining family. Our findings suggest that the needs of non-traditional elders are not currently addressed across senior housing and LTC settings. The results indicate compromised quality of care and life for residents. We posit a person-centric model for defining family and explore its relevance to, and implications for, future research.

SESSION 1105 (POSTER)

INTERVENTIONS

DETERMINANTS OF PERSISTENT MEDICATION USE AMONG MEDICARE BENEFICIARIES WITH DIABETES

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Persistent use of medications such as older oral antidiabetic agents, ACE inhibitors, angiotensin II receptor blockers (ARBs), and statins among diabetic patients has been shown to result in lower Medicare costs and reduced risk of hospitalization. Factors associated with persistency of medication use are unknown. This study aims to predict persistency in medication use over a 3 year study period for users of older and newer oral antidiabetic agents, ACE-Is and ARBs, as well as statins. Hypothesized predictors include disease management behaviors (taking a diabetic self-management class, testing blood sugar, diet, exercise, aspirin use, checking feet sores), disease knowledge (good, some, and poor), medication management (use of older and new oral antidiabetic agents, ACE-Is and ARBs, statins, insulin, and other lipid lowering drugs), as well as other demographic covariates. Using data from the Medicare Current Beneficiary Survey (MCBS) from 1997 to 2005, six cohorts of Medicare beneficiaries with diabetes were each followed over 3 years (N=2,187). Preliminary multivariate regression results show that persistent medication management (with the exception of insulin and other lipid lowering drugs) was positively associated with persistent use of older and newer antidiabetic agents, ACE-Is and ARBs, as well as statins ($p<0.05$). Of the disease management behavior variables, testing blood sugar was associated with older antidiabetic agents and statins, while exercise was associated with these former drugs as well as with ACE-Is and ARBs ($p<0.05$). Increasing persistency of medica-

tion management for diabetes may have important policy implications for drug coverage and the Medicare program.

UNLOCKING THE ‘BLACK BOX’ OF CARE MANAGEMENT THROUGH A RETROSPECTIVE EXPLORATION OF BANDURA’S SOCIAL LEARNING CONSTRUCT OF SELF-EFFICACY: A CASE STUDY

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Stroke is the third ranking cause of death in the United States. Seventy-five percent of all strokes occur in people over the age of 65. Stroke survivors must learn self-management strategies to modify risk factors to avoid recurrent stroke and its disabling consequences. Interventions to promote self-efficacy can improve self-management skills. Self-efficacy consists of four principles: mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states (Bandura, 1997) The purpose of this case study is to conduct a retrospective review from field notes and outcome measures of a participant in the Strategies to Enhance Post-Stroke Care and Recovery (STEPS CARE Summa Foundation and the National Institute of Neurological Disorders and Stroke, 5 R01 NS041333-02) Trial guided by the social learning construct of self-efficacy. A 68 year-old female status post-ischemic stroke with mild dysarthria was randomized into the intervention group of a post-stroke care management trial. The intervention involved an in home assessment and stroke education provided by an Advanced Practice Nurse Care Manager (APN-CM). The APN-CM uncovered that the patient was depressed, but reluctant to seek treatment. Phone follow-up and health coaching were provided over a 6 month period. Coaching consisted of positive affirmations, demonstration of skills, and monitoring of physiological states that could affect recovery. The patient's CES-D depression screen improved from 8 to 0. She quit smoking and developed an exercise routine of walking the track 45 minutes 5 days a week. The APN-CM utilized skills to promote patient self-efficacy that supported behavioral changes and improved stroke outcomes.

ADJUSTMENT TO PARKINSON’S DISEASE: THE ROLE OF COPING, CONTROL, AND GOAL ORIENTATION

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The present study investigates a possible causal model for the prediction of subjective well-being in Parkinson’s disease (PD). The primary hypothesis proposed that, controlling for disease severity, validation-seeking attitudes among individuals with PD would predict less use of secondary control coping strategies related to PD, lower psychosocial adjustment to PD, and lower subjective well-being. I also proposed that validation-seeking attitudes would indirectly contribute to lower adjustment to PD through the type of coping strategies used, as well as indirectly affect subjective well-being through both coping strategies and adjustment to PD. Consistent with the hypotheses, validation-seeking attitudes did predict lower positive subjective well-being, and better adjustment to PD predicted better overall subjective well-being, controlling for all other variables. However, hypotheses regarding relationships between the use of secondary control coping strategies and validation-seeking, adjustment to PD, and subjective well-being were not supported. These findings might have significant implications in planning interventions with individuals coping with physically limiting illness such as PD, both to decrease depressive symptoms and to improve positive subjective well-being.

THE DEVELOPMENT OF THE THAI VERSION OF THE DIABETES MANAGEMENT SELF-EFFICACY SCALE (T-DMSES) FOR OLDER ADULTS WITH TYPE 2 DIABETES

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The purpose of this study was to develop the T-DMSES for older adults with type 2 diabetes and evaluate its psychometric properties. This study had two phases. Phase 1 consisted of the back-translation method, using consensus meetings to translate and modify the 20-item English version DMSES to Thai. There was semantic equivalence of translation with .88 of Intraclass Correlation Coefficient (ICC). The Phase 2 sample ($n = 209$) of older adults with type 2 diabetes (mean age = 67.4, $SD = 5.5$) were from diabetic clinics in eight hospitals from four parts of Thailand. Acceptable content validity with the scale-level content validity index of .96 and the item-level content validity indexes of .80 or higher were found. Exploratory and confirmatory factor analysis supported the T-DMSES consisting of three subscales with 19 items. The convergent validity of the T-DMSES correlated well with the Thai version of the General Self-efficacy Scale ($r = .36, p < .01$). Criterion-related validity showed that the T-DMSES significantly correlated with the Thai version of the Ronsenbergs' Self-Esteem Scale ($r = .43, p < .01$). High internal consistency was found with Cronbach's alpha = .95 and test-retest reliability (ICC = .70) were acceptable. Conclusion: The T-DMSES is a brief and psychometrically sound measure. By using the T-DMSES, self-efficacy beliefs regarding diabetes self-care may be used to evaluate management of specific types of diabetic self-care behaviors in the Thai population.

DOES DIABETES-SPECIFIC HEALTH LITERACY MATTER FOR DIFFERENT DISEASE OUTCOME MEASURES?

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Diabetes mellitus (DM) is a major public health problem in the U.S. and puts individuals at risk for serious illness and even death. Whereas self-management is known as an effective strategy for control of DM, it is often challenging for patients because it requires extensive knowledge of complex treatment routines and recommended lifestyle changes. Recent studies with hospital patients suggest that poor health literacy (HL) or an inability to understand health-related information seems to be a barrier to DM self-management. However, little is known about the association between HL and DM self-management when controlling for demographic and health-related characteristics. Using data from the 2002-2003 Health and Retirement Study and diabetes module ($N = 1901$), this research asks whether health literacy matters for three different DM outcome measures: HbA1c test results, self-assessed DM self-care, and the average number of days five recommended self-management behaviors are practiced each week. The diabetes-specific HL index was created from 10 questions regarding understanding of DM and its management (Cronbach's alpha = 0.927). A hierarchical multiple regression analysis was conducted for each of the three outcomes with demographic and socio-economic characteristics entered first, DM and health-related factors entered second, and DM-specific HL entered on a final step. DM-specific HL was significantly associated with self-assessed DM self-care ($R^2 = 0.21$) and the average number of days the five recommended self-management behaviors were practiced ($R^2 = 0.08$). Explanations are evaluated for why diabetes-specific HL is associated with two outcomes of DM self-management but not with HbA1c test results.

USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR FOUR CHRONIC CONDITIONS AMONG OLDER ADULTS

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Half of older adults in the United States use complementary and alternative medicine (CAM). Little is known about their reasons for CAM use for chronic health conditions, which we examined for ages 50+ for arthritis, diabetes, depression, and back/neck pain, common conditions that reduce quality of life. For example, there are limited options for effective medical treatment of diabetic neuropathy. Data were from the 2007 National Health Interview Survey and its CAM supplement ($n=10,104$). Descriptive, chi-square and logistic analyses accounted for the survey design and were weighted for national representativeness. Controls included age, race/ethnicity, education, marital status, health insurance, body mass index, health behaviors, and region. Those with arthritis, diabetes, or depression used CAM because medical treatments failed (59%, 17%, 13%, respectively), were too expensive (54%, 17%, 18%), or following health care provider recommendations (52%, 15%, 13%). Nearly 41% with back/neck conditions used CAM because medical treatments failed. Many did not discuss CAM use with providers: arthritis 49%, diabetes 15%, depression 4%, back/neck 13%. In adjusted results for arthritis, Latinos and African Americans were less likely to use CAM (Odds Ratios 0.53 and 0.71, both $p < .001$). Latinos and African Americans were also less likely to use CAM for the other conditions. CAM use tended to increase with educational attainment. Those with chronic conditions should be encouraged to discuss CAM use with health providers. This may prompt improved treatment, either by combining an effective CAM with conventional therapy, or by choosing an alternative conventional therapy to better address the individual's need.

RACIAL/ETHNIC DIFFERENCES IN HEALTH-RELATED SOCIAL CONTROL IN PATIENTS WITH TYPE 2 DIABETES

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Health-related social control describes social network members' efforts to influence and regulate the health behavior of another individual. This type of influence may be particularly important in the context of chronic illnesses, which require daily adherence to prescribed health behaviors. No studies to date, however, have examined racial/ethnic differences in the receipt of and response to social control. Data were analyzed from an ethnically diverse sample of 492 older adults aged 65 and older who were recruited from 7 university-affiliated medical clinics and had a physician's diagnosis of type 2 diabetes. The sources, frequency, and effects of social control on dietary behaviors and emotional responses were examined. Results revealed that spouses were the most commonly reported sources of social control for non-Hispanic white patients, whereas children were the most commonly reported sources of social control for Hispanic and Vietnamese patients. Vietnamese patients reported receiving positive control strategies most frequently, whereas Hispanic patients reported receiving negative control strategies most frequently. Regression analyses revealed that both types of control strategies were significantly associated with better dietary behavior for Hispanic patients ($p < .05$), but not for white or Vietnamese patients. Hispanic and Vietnamese patients responded with appreciation to both types of control strategies (all $ps < .01$); white patients, on the other hand, responded with appreciation to positive control strategies, but with hostility to negative control strategies (both $ps < .001$). These findings underscore the importance of considering racial/ethnic differences in examining social network members' involvement in older adults' disease management.

THE ROLE OF SPIRITUALITY IN THE RELATIONSHIP BETWEEN CHRONIC ILLNESS AND PSYCHOLOGICAL WELL-BEING

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Spirituality plays an important role in the experience of chronic illness, affecting individuals at both psychological and physiological levels. Our research explores correlates of spiritual experiences over a three-year period in a sample (N = 118; mean age 82.01 years) in a continuing-care retirement community. Utilizing responses to the Daily Spiritual Experiences Scale, scores were analyzed for changes over time and their moderating effect in the relationship between chronic illness impact and markers of psychological well-being (as measured by the Geriatric Depression and Life Satisfaction scales). Repeated measures ANOVA indicated a significant decline ($p < 0.01$) in the amount of spirituality over time and t-tests showed a significant difference by gender ($p < 0.01$ in years 2 and 3), with women exhibiting higher levels of spirituality. Analyses found correlations between spirituality scores and life satisfaction in all years (year 1: $r = -.288$, $p < 0.01$; year 2: $r = -.209$, $p < 0.05$; year 3: $r = -.330$, $p < 0.001$) and there were only correlations between spirituality and depressive symptoms in years 1 ($r = .186$, $p < 0.05$) and 3 ($r = .254$, $p < 0.01$). Moderation effects of spirituality on the relationship between chronic illness impact and markers of psychological well-being were explored in all years, with an effect found only for depressive symptoms in year 3. Higher impact of chronic illnesses is associated with more depressive symptoms under conditions of low spirituality, which offers a clear connection to the management of chronic and comorbid conditions. Further research should evaluate the usefulness of a spirituality-inclusive care model in treating chronically ill older adults who exhibit depressive symptoms.

A WAKE-UP CALL OR JUST TOO LATE? HEALTH BEHAVIORS CHANGES AFTER CHRONIC ILLNESS

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Evidence is conclusive that lifestyle improvements following diagnosis with a chronic condition can reduce recurrence or complications, improve quality of life, and increase longevity. Although intervention studies suggest improvements are possible, population-based studies about how often patients typically make lifestyle changes are needed. We examined rates of smoking, alcohol consumption, and physical activity within 2 years before and after a newly reported diagnosis of heart disease (N = 2,736), cancer (N = 1,088), diabetes (N = 1,282), stroke (N = 536), and chronic lung disease (N = 919) among those 50+ in the Health and Retirement Study. Results showed significant, but modest, improvements that differed substantially across conditions. The most consistent improvement across conditions was in smoking rates (25.7% vs. 18.9% for heart disease; 23.7% vs. 17.1% for cancer; 20.7% vs. 17.3% for diabetes; 29.5% vs. 22.8% for stroke; 43.0% vs. 34.9% for lung disease). Patients were also generally less likely to consume any alcohol following diagnosis (49.5% vs. 42.8% for heart disease; 54.3% vs. 48.5% for cancer; 45.5% vs. 39.0% for diabetes; 41.2% vs. 28.3% for stroke; 47.2% vs. 40.1% for lung disease). Those with heart disease were most likely to increase vigorous activity 3+ times/week compared to those with other conditions (29.9% vs. 40.0% for heart disease; 38.9% vs. 39.4% for cancer; 35.3% vs. 33.6% for diabetes; 33.7% vs. 36.6% for stroke; 30.0% vs. 30.8% for lung disease). The findings suggest a need for further public health efforts to encourage more fundamental lifestyle improvements.

IMPROVING OUR UNDERSTANDING OF EFFECTIVE COMMUNITY-BASED ALZHEIMER'S INTERVENTIONS

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There is a growing body of evidence supporting the effectiveness of specific non-medical interventions for community-based persons with Alzheimer's disease and their caregivers. Several meta-analyses have synthesized the results of sub-sets of these individual studies. However, synthesizing this body of knowledge is complex because of several factors, such as: the range of outcomes analyzed, and the range of measures used for each outcome; varying characteristics of participants in studies, including dementia severity; and the medical treatment context for persons included in the studies, including the use of prescription medicines. We reviewed the intervention research for non-medical, non-drug interventions for community-based persons with Alzheimer's disease and their caregivers, focusing on articles whose analytical design had the potential to identify a statistically significant improvement in the condition of the caregiver or person with Alzheimer's disease as a result of the intervention. This presentation will describe the factors that affect our ability to fully synthesize the results of effective interventions, and will hopefully inform future interventions and their evaluations.

REDUCTION OF HEALTHCARE COSTS: IMPACT OF AN ENRICHED SENIOR OUTREACH PROGRAM

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Increasing costs of healthcare is a key issue confronting all Americans today. Any effort to reduce the costs of healthcare is highly commendable. This problem is being addressed by the Senior Outreach Program (SOP) for at-risk senior citizens at the Mercy Home Care Program in Toledo. The team, which includes UT faculty and community healthcare professionals, are assessing the outcomes of this program. Seniors with mental illness and/or alcohol concerns have been observed to use costly services such as ambulances, ERs, and inpatient hospitalization more frequently. Specific factors associated with these high use patterns among this population remain unclear. An ongoing longitudinal study aims to collect data about the older adults entering this program. The first wave of data has been analyzed for those seniors. Preliminary data analysis suggests that SOP clients used significantly fewer inpatient hospital days after entering the program than in the year prior. In addition, between SOP admission and discharge, cigarette smoking declined and support from neighbors and community-based groups increased. The impact of the program is statistically significant at the 0.028 level ($t = 2.051$, $N = 18$, $df = 17$; one-tailed significance = 0.056).

PROJECT ASPIRE: A VIDEOPHONE-DELIVERED MEDICATION ADHERENCE INTERVENTION FOR HIV+ PERSONS LIVING IN RURAL AND URBAN AREAS

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Project ASPIRE (Adherence Spaced-Retrieval Intervention with Remote Enhancement), an NIMH-funded study, is testing the feasibility, acceptability, and effectiveness of a videophone-delivered medication adherence intervention and of videophone-delivered pill counts. This presentation will focus on 11 older participants. We will begin by describing methods to conduct pill counts via videophone. We will then describe the intervention using a case study of "Stanley", a 50-year-old gay male living in rural Ohio. Stanley's baseline adherence rate was 74%. Intervention sessions were administered by a social worker twice per week for four weeks. An important treatment goal involved having Stanley place his pills, wallet, and keys near his front door every night before bed. After the intervention, Stanley's mean adherence rate

improved to 92.9%. There was a 6% improvement in adherence across all participants, albeit this improvement was not statistically significant. All participants remarked that the intervention helped “a lot”. Regarding the accuracy of videophone-based pill counts, concurrent in-person pill counts matched videophone-based pill counts. Regarding videophone acceptability, 10 of 11 participants indicated that they would “definitely be willing to use a videophone again in the future”. Preliminary findings suggest that videophones are a feasible, acceptable, and cost-effective modality by which to deliver interventions and track medication adherence in persons living with HIV/AIDS, particularly for persons living in rural areas. After attending this presentation, participants will be able to describe key elements of the intervention, understand pill count protocols, and discuss the feasibility and acceptability of using videophones in adherence work with HIV-infected persons.

GOT GAME? VALIDATING VIDEO GAME MEASURES OF COGNITIVE PROCESSING

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Engaging in cognitively stimulating activities has been shown to delay or prevent cognitive declines associated with aging (Zelinski et al.). Proprietary companies are now marketing cognitive training programs to community-dwelling adults, although the validity of these games has not been tested empirically. Thus, we examined whether video game tasks correlate with known psychometric scales of cognitive functioning and whether the associations differ by age. Adults ($n = 135$, age 18 to 58) completed a variety of psychometric tasks (i.e., Digits Backward, Trail Making Test, Raven's Matrices, Digit Symbol Coding, Ekstrom Vocabulary) and up to six Brain Age games on the handheld Nintendo DS. Measures hypothesized to index the same underlying construct exhibited correlations ranging from .20 to .60 across all participants, providing evidence of validity. Using Fisher's r to Z transformations to examine differences between the correlation coefficients by age group, no significant differences emerged. Moreover, results of a confirmatory factor analysis suggest three interpretable factors accounting for 68.7% of the variance. Together, these results suggest that the Brain Age tasks may be suitable for community-based cognitive intervention programs with adults. On-going field work (Nadorff et al.) is examining the effectiveness of these games as a cognitive intervention.

TESTING SELF-EFFICACY AS A PATHWAY THAT SUPPORTS SELF CARE AMONG FAMILY CAREGIVERS IN A PSYCHOEDUCATIONAL INTERVENTION

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This study investigated the impact of a psychoeducational intervention on health risk and self-care behaviors of caregivers of individuals with Alzheimer's disease ($N=325$). Moreover, this study investigated the extent to which changes in self-efficacy explained changes in health risk and self-care behaviors. The study's findings revealed that family caregivers experienced reductions in health risk behaviors, and improvements in exercise, stress management, and relaxation activities as a result of participating in the psychoeducational intervention. Improvement in self-efficacy was linked with reductions in health risk behaviors, and increased involvement in stress management and relaxation activities. Implications are discussed in terms of the need to understand the mechanisms by which interventions influence family caregivers.

PERSONALITY ATTRIBUTES MODERATE THE EFFECTS OF STRESS INOCULATION TRAINING ON EVERYDAY SKILL

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Given the salience of individual differences in later life, the present study explored the issue of variability among older persons regarding

the benefits of cognitive behavior therapy. In order to explore moderator effects as they relate to a cognitive behavior therapy (i.e., stress inoculation training) intervention's impact on everyday competence, 77 community residing older adults (M age = 70.9) were randomly assigned to either a 5 session stress inoculation program targeting the modification of dysfunctional beliefs about declines in one's everyday skills ($n = 39$), or to a waiting list/no contact control group ($n = 38$), with measures of everyday competence (e.g. ETS, IADLs, Independent Living Scale scores) as dependent variables. After having first differentiated persons at the upper and lower quartiles of respective moderator variables' sample distributions at pretest, mixed models ANOVAS suggested that ($p < .05$) I levels of state anxiety, depression, both ability-specific and generalized self-efficacy, and self-rated concerns regarding the maintenance of one's everyday skills each moderated treatment benefits over time. These findings clearly suggest that moderator effects in both personality attributes and concerns about the demise of one's everyday living skills are substantial in understanding the impact of stress inoculation training on everyday skill among older persons. Thus, in this respect, some older persons benefit from stress inoculation training to greater or lesser degrees, consistent with variation across persons along multiple parameters.

THE INFLUENCE OF COGNITIVE TRAINING ON THE QUALITY OF RECALL FOR SHORT STORIES

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Drawing on the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) trial, the present study investigated whether a memory training intervention influenced specific features of memory for prose. This study examined whether a ten-session memory training program could improve memory for three aspects of paragraph recall: main ideas, details, and verbatim recall of specific phrases in the paragraphs. A subset of memory-trained participants also received four booster training sessions 1- and again 3-years post-initial training. Memory-trained participants ($N=478$) were compared to no-contact control participants ($N=476$), as well as two comparison groups who received either 10-session reasoning ($N=478$) or speed ($N=481$) training programs; five-year maintenance of training gains was investigated. Mixed effects models demonstrated the following pattern of effects. Data from 4 of the 6 study sites with available archival data was used. For total recall, a significant intervention group by occasion interaction ($p < .05$) was obtained, such that participants who received the initial ten sessions of memory training outperformed all other participants immediately, 1- and 3-years post-training. Initial memory training also improved main-idea recall, but this was true only at immediate posttest. For verbatim recall, booster trained participants outperformed all other participants ($p < .05$) at the third-annual followup. The ACTIVE memory training program encouraged participants to concentrate particularly on remembering main ideas, which may explain why this component of paragraph recall initially responded to training. Discussion focuses on possible explanations for the three-year durability of training effects, and the cumulative benefit of booster training for verbatim recall.

IMPACT OF COMMUNITY-BASED HEALTH INTERVENTIONS ON DEPRESSION OUTCOMES AMONG OLDER ADULTS WITH HEART DISEASE: A SYSTEMATIC REVIEW

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Purpose: This systematic review examined the effectiveness of community-based health interventions on depression outcomes among home-bound elderly (65 years and older) with heart disease. Design and Methods: A comprehensive literature search was completed to evaluate selected randomized controlled studies and their methodological quality using standard criteria developed by the Cochrane Collaborative

Review Initiative. Results: Seventeen studies met our inclusion criteria and were reviewed. Studies and interventions differ in scope and methodological rigor. Rigorous research has been limited to outpatient or home-based interventions. Sample sizes vary widely; all studies include depression outcomes; problems in masking of group assignment and treatment fidelity are noted. Out of six studies with positive treatment effects on depression outcomes, five studies were home-based heart disease interventions. Implications: Mixed evidence for community-based heart disease interventions on depression outcomes was found. There is a need for further rigorous research of community-based heart disease interventions of the effects on depression outcomes among older adults with heart disease.

LEAVING HOMELESSNESS QUILTING WORKSHOP: AN INNOVATIVE TOOL FOR OLDER AFRICAN AMERICAN WOMEN

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The quilting workshop is a creative innovation for helping older homeless African American women that addresses the consequences of their experiences as they endeavor to transition out of homelessness. While quilting has not been recognized as a therapeutic intervention, its use with older African American women who are coping with homelessness provides an additional strategy in a sociorehabilitative program. The focus of the quilting workshop was on expressive therapeutic outcomes rather than technical aspects of quilting. The quilt-making workshop intervention provided opportunities for participants to learn more about each other without resistance and anxiety normally associated with more formal group work settings. Eight older women participated in the 5-week intervention that met for approximately 2.5 hours once a week. Each woman interpreted her experiences with homelessness to create her patch. The collection of patches captured each of the unique pathways into and collective efforts associated with emergence from homelessness. The workshop encouraged collaborative interactions among the women, provided social support, and allowed a cathartic review of individual homeless experiences. The women developed alliances and garnered support as they became engaged in each other's worlds: developing trust, mutual respect, reciprocal affirmation, and team-building; sharing and talking informally; and comparing fruits of their work. The expressive and creative quilting workshop format helped participants develop a supportive network vital to facilitating the women's successful transitions out of homelessness, and restoration and recovery from its traumatic consequences.

THE IMPACT OF HEALTH ON TREATMENT RESPONSE IN COGNITIVE BEHAVIORAL THERAPY FOR DEPRESSIVE SYMPTOMS

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Little information is available on the efficacy of cognitive behavioral therapy in those with various health conditions or comorbidities. This study examines the impact of health conditions on treatment response to home delivered cognitive behavioral therapy in older adults with depressive symptoms assessed with the Hopkins Symptom Checklist-20 (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Data is from the Project to Enhance Aged Rural Living study (Scogin, Morthland, Kaufman, Burgio, & Kong, 2007). The Charlson Comorbidity Index (Charlson, Pompei, Ales, & MacKenzie, 1987) was used to determine a comorbidity score and identify health problems. Of the 75 treated participants, 77.3% improved; 20% worsened; and 2.7% had no change in depression scores. A paired samples t-test of baseline and posttreatment HSCL scores was significant, ($t(74)=-6$, $p<.001$), indicating that there was a reduction in depressive symptoms across time. A regression analysis was conducted to assess if greater comorbidity was related

to higher depression severity at posttreatment while controlling for pre-treatment scores but was not significant, suggesting that treatment response was not affected by the number of health conditions. The percent of treatment responders by health conditions (e.g. arthritis, diabetes, hypertension, cerebrovascular disease, myocardial infarction, and cancer) is presented.

RECEIVING WHILE GIVING: THE DIFFERENTIAL ROLE OF RECEIVING HELP ON CAREGIVER REWARDS FOR SPOUSE AND ADULT-CHILDREN

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There is a growing body of literature on the utility of caregiver rewards as buffers of the negative consequences of caring for a family member with Alzheimer's disease. Many caregiver psychoeducational interventions aim to empower caregivers to seek and obtain help from their social support network, with the expectation that help will enable caregivers to cope effectively. This study investigated the impact of changes in help and changes in satisfaction with help on positive aspects of caregiving for both adult-child ($N=156$) and spouse ($N=171$) caregivers who attended a psychoeducational intervention. Analyses using structural equation modeling revealed that increases in help predicted increases in caregiver rewards for adult-children. However, increases in satisfaction with help predicted increases in caregiver rewards for spouses. These group differences suggest that the quality of support is critical for spouses, whereas receiving extra help is useful for adult-child caregivers. These findings are discussed in terms of importance of understanding the differential needs of spouse and adult-child caregivers in practice.

IMPROVING COPING AND CARE MANAGEMENT STRATEGIES FOR INDIVIDUALS WITH DEMENTIA AND THEIR FAMILY CAREGIVERS: FINDINGS FROM PROJECT ANSWERS

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Individuals with dementia and their families coping with mild to moderate dementia face unique challenges in managing and coping with the symptoms of dementia. These challenges can result in negative psychosocial outcomes for both caregivers (CGs) and individuals with dementia (IWDs). This poster will describe a 6-session intervention program designed to address the care needs of both IWDs and their family CGs. Grounded in a Strength-Based Approach, the intervention program, ANSWERS (Acquiring New Skills While Enhancing Remaining Strengths) provides caregiving dyads with a core set of evidence-based skills and techniques for managing and coping with dementia. Caregiving dyads were randomly assigned to either the control condition ($n = 58$) or the intervention condition ($n = 52$) and all participants were interviewed twice, once prior to random assignment and at T2, approximately 15 weeks later. Dyads in the intervention program received education and skills training in the following areas: effective communication; managing memory; staying active; and recognizing emotions and behaviors. Compared to the control condition, CGs in the intervention condition reported significantly: fewer symptoms of anxiety and depression; higher levels of caregiving mastery; less role captivity; less health strain; and less distress associated with IWD's ability to complete IADLs. Compared to the control condition, IWDs in the intervention condition reported significantly: fewer symptoms of anxiety; less relationship strain; less difficulty performing PADLs; and improved coping skills.

These results highlight the merits of using a Strength-Based Approach and demonstrate the efficacy of the ANSWERS intervention program.

SESSION 1110 (SYMPOSIUM)

MENTAL HEALTH AND ADJUSTMENT AMONG GRANDPARENT CAREGIVERS

Chair: B. Hayslip, *Psychology, University of North Texas, Denton, Texas*

Key to the well-being and adjustment of grandparent caregivers is both describing and understanding differences among them regarding their mental health as well as regarding their attitudes to mental health and mental health care. In light of the physical, psychological and interpersonal difficulties faced by many grandparent caregivers, seeking and receiving mental health care is critical to their well-being, relationships with others, their health, as well as to the health and well-being of their grandchildren. Holding positive attitudes toward mental and mental health care enhances the likelihood of seeking help, while negative such attitudes undermine help seeking. This symposium explores the mental health of grandparent caregivers, focusing on the identification of risk factors key to targeting those custodial grandparents who may be distressed, and consequently in need of professional help that may benefit them and their grandchildren. This symposium also explores variability in mental health attitudes among grandparent caregivers, also critical to seeking timely professional mental health care. The papers by Goodman, by Mitchell and colleagues, and by Yancura break new ground in incorporating grandchild characteristics as predictors of mental health difficulties among custodial grandparents, as well as in utilizing both longitudinal and qualitative data, while the paper by Hayslip and colleagues addresses the heretofore understudied issue of variability among grandparent caregivers in mental health attitudes. These papers allow us to begin to understand the antecedents of variations in mental health among grandparent caregivers, key to designing and providing mental health services to them which can be effectively utilized.

MENTAL HEALTH ATTITUDES AMONG CUSTODIAL GRANDPARENTS

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Individual and within group differences in attitudes toward mental health services were explored among 240 grandparent caregivers (M age = 58.1; 82% women). Utilizing measures of openness to seeking help, biases about mental health issues, and breadth of conceptions of mental illness, hierarchical regression analyses indicated ($p < .05$) that income and experience with individual/group therapy predicted openness scores; experience with individual therapy and parental efficacy predicted biases scores; and experience with group therapy, number of grandchildren cared for, personal hardiness, and role satisfaction predicted breadth scores. MANOVAs revealed ($p < .01$) gender differences in all attitude scale scores, age differences in breadth scores, family caregiving type differences in bias and openness scores, and the grandchild's receiving professional help differences in all attitude scale scores. These findings suggest substantial variability among grandparent caregivers in mental health attitudes, wherein such attitudes are key to seeking help for themselves and their grandchildren.

GRANDMOTHERS RAISING GRANDCHILDREN: EVALUATION TEN YEARS LATER

C.C. Goodman, *California State University, Long Beach, Long Beach, California*

Grandparents raising grandchildren often provide care for extended periods, sometimes throughout their grandchild's childhood. This study is a follow-up of 50 grandmothers raising grandchildren in skipped gen-

eration families 10 years after (time 2) their original interview (time 1). Most grandmothers were retired, age 67 on average. Their young adult grandchildren, age 19 years on average, were primarily still living with them (62%). Gains in life satisfaction of the grandmothers (time 2, adjusted for time 1) were related to closer bonds with these grandchildren at time 1. Current (time 2) closeness with grandchildren was not significantly related to these gains in life satisfaction over the 10 year period, nor were changes in relationship closeness with the grandchild (time 2 adjusted for time 1). That is, good relationships with grandchildren during the school years contribute to an evaluation of a good life well into the future.

PATTERNS OF GRANDPARENTAL CAREGIVING WITH RELATION TO GRANDPARENT AND YOUTH FUNCTIONING IN A LOW-INCOME SAMPLE

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Many older adults are involved in providing care for grandchildren. In the current talk, we examine two important aspects of grandparental caregiving in relation to youth functioning in early childhood: grandparent involvement in caregiving and the link between grandparent psychopathology and child internalizing and externalizing disorders. Participants were part of a larger longitudinal study of 731 low-income families and data were collected when children were 2, 3, and 4 years old. Latent Growth Modeling (LGM) analyses indicated that initial levels of child externalizing problems at age 2 predicted greater use of grandparents as caregivers over time, while the involvement of grandparents as caregivers at age 2 predicted growth in youth internalizing symptoms over this same age range. Additionally, a Generalized Estimating Equations (GEE) approach was used to estimate the relations between grandparental symptoms and youth functioning. Grandparental depressive symptoms were related to observer ratings of their interactions with their grandchildren.

RISK FACTORS FOR DEPRESSION IN CUSTODIAL GRANDPARENTS IN HAWAII: THE STORY BEHIND THE NUMBERS

L. Yancura, *University of Hawaii, Honolulu, Hawaii*

Grandparents raising grandchildren (GRG) without support from the children's biological parents may be at greater risk for depression than their non-caregiving peers. This may be due to a high number of comorbidities for depression related to this off-time caregiving role. The present study uses qualitative and quantitative data from a sample of 274 ethnically-diverse custodial grandparents recruited through the State of Hawaii Department of Education to examine risk factors for depression. The ages of the grandparents ranged from 40-90 years ($X = 59.33$, $sd = 17.92$). Most (79.3%) were female. The most common reasons for raising grandchildren were because the children's parents were on drugs or in jail. Many GRG reported living in a rural area (62.5%), not having enough money to meet monthly expenses (48.5%), and/or receiving public assistance (28.3%). Responses to open-ended questions demonstrate that grandparents experience these difficulties but also experience positive aspects of caregiving.

MOBILITY

PREDICTING AGE RELATED CHANGES IN MOBILITY AND DRIVING HABITS

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M. Mathews, D. Roenker, G. Cissell, K. Ball Department of Psychology, University of Massachusetts-Amherst, Western Kentucky University, University of Alabama-Birmingham Older adults encounter many changes as they age, both cognitive and physical, which may impact mobility in terms of driving and exposure to traffic situations putting many at risk for lost independence. The present study sought to replicate a structural equation model proposed by Vance, Roenker, Cissell, Edwards, Wadley, and Ball (2006) in which it was found that cognitive function and health were predictive of both increased driving avoidance and decreased exposure to a variety of traffic situations. However, physical function appeared to make no contribution. The current study will attempt to replicate this model on a sample (N=299) of adults over age 55 who participated as part of the driver's licensing process at three Motor Vehicle Administration sites in Maryland. Upon recruitment, participants completed functional assessments of visual, motor, and cognitive abilities. Participants also consented to participate in yearly telephone interviews for the next four years (1999-2004) and were asked a variety of questions to determine their current health status, driving ability, and driving habits. In order to examine the time course of normal changes in mobility and determine what factors predict mobility and driving exposure, composite latent constructs of health status, physical function, and cognitive function were created as predictors of the latent constructs of driving exposure and avoidance in a structural equation model.

DISEASE, DISABILITY, AND DEVICES: WHAT DETERMINES OLDER ADULTS' ADOPTION OF MOBILITY ASSISTIVE DEVICES?

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The purpose of this study is to predict the adoption of mobility devices, giving special attention to the contributions of disease, impairment, and prior mobility device use. Panel data from the 1994, 1999, and 2004 National Long Term Care Survey (NLTC) were used (N=1,047). A series of logistic regressions show that older adults were more likely to adopt a cane between 1999 and 2004 if they were female, overweight, obese, experienced higher levels of lower body impairment, or did not rely heavily on personal care to perform activities of daily living in 1999. Walker adoption was predicted by being older, obese, having arthritis, being a cane user in 1999, or experiencing an increase in lower body impairment between 1994 and 1999. Wheelchair adoption was more likely among older people, those with diabetes, or those who used a cane or walker. Prior use of a cane or walker increased the odds of wheelchair adoption by 104% and 150%, respectively. These findings indicate that lower body impairment and obesity raise the likelihood of using canes and walkers and that these devices are intermediary steps in the adoption of wheelchairs.

BMI TRAJECTORIES IN U.S. MIDDLE-AGED AND OLDER ADULTS LIVING WITH DIABETES AND LINK WITH FUTURE DISABILITY TRAJECTORIES

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Inconsistent findings regarding weight change patterns in adults with diabetes are reported in diabetes research. Few studies have explored how patterns of change in body weight relate to patterns of change in

disability across time. The present study aims to: (1) discern the distinct weight and disability trajectories experienced by middle-aged and older adults living with diabetes; and (2) reveal how weight trajectories are associated with disability trajectories later in life. Data on 1,064 adults aged 51-61 who self-reported having diabetes in 1992 U.S. Health and Retirement Study (HRS) were analyzed by dual-trajectory models based on a group-based trajectory modeling approach. We identified four distinct trajectories of body weight change in adults with diabetes from midlife to older age (stable normal weight, 29.0%; stable overweight, 46.5%; loss and regain obese, 17.6%; and weight cumulating morbid obese, 6.9%) and three disability trajectories (little or low increase, 34.6%; moderate increase, 45.4%; and chronic high, 20.1%). Individuals in stable normal weight group had highest propensity in little/low increase disability, and individuals in the weight cumulating morbid obese group had highest probability in chronic high disability. However, 19% of adults in stable normal weight group go into chronic high disability, suggesting the complexity of diabetes control in those with relatively normal weight. CONCLUSIONS: Various relationships among these two sets of trajectories were found. Importantly, the recommendations for weight control in adults with diabetes in order to prevent future disability were strongly supported in the present study.

LEISURE PARTICIPATION EXPERIENCES OF OLDER ADULTS LIVING WITH LOW VISION: THE CHALLENGES OF "GETTING OUT"

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Vision loss significantly impacts participation, defined broadly as engagement in life activities. Participation in life activities has been shown to facilitate health and well-being. Researchers have demonstrated the importance of social participation and engagement in meaningful activities to quality of life for persons with physical disabilities. Yet most of the research on participation about older adults with vision loss focuses only on activities of daily living (ADL) and/or instrumental activities of daily living (IADL). Fewer researchers have explored participation beyond ADL and IADL for persons with low vision. Yet leisure participation has been shown to be related to quality of life, successful aging, and depression for older adults. Therefore, the purpose of this research was to learn about the lived experience of older adults with acquired vision loss, specifically related to participation in leisure activities. Through in-depth, repeated interviews of 26 older adults with vision loss and observations of their participation in leisure activities, this phenomenological study provides an understanding of the experience of vision loss related to leisure participation. Several key themes evolved from this study. One of the main influences on leisure participation is the daily struggle of "getting out." Several themes related to this topic emerged including transportation, social support, vulnerability, less fun, and the lack of community accessibility. Occupational therapy practitioners need to promote policies that eliminate barriers and support leisure participation for older adults with low vision, including improved lighting in community buildings, alternative transportation options, and increased font size for public documents.

WALKING CHARACTERISTICS ON THE 5 DAYS BEFORE AND AFTER A FALL: NO HARM, NO FOUL, NO CHANGE?

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It is difficult to motivate older people to change behavior following a single fall. We hypothesized that for non-injurious falls there would be little change in walking speed or amount of walking for the 5 days prior to or immediately following the fall. Subjects were 21 independently living older persons (mean age: 84 years; 81% female) who experienced a non-injurious fall. Using unobtrusive in-home gait assessments, walking speed and number of walks were determined by sequential firing of motion sensors. Fall onset was determined by weekly

on-line questionnaires asking if falls occurred in the prior week. Statistical analysis compared mean walking speed and number of walks 5 days before and after each fall using paired t-tests. During the study period (mean = 553 ± 79 days), subjects reported 35 non-injurious falls. No significant difference between mean walking speed prior to the fall and mean walking speed post-fall among subjects was identified. Average number of walks per day ($n = 14 \pm 11$) among subjects was also not significantly different preceding or following the fall. We found no significant difference in walking speed or activity, as measured by daily number of walks, in the period preceding or following a fall. This suggests that older persons do not significantly change their walking habits after a fall in the absence of an injury which may contribute to a “no harm, no foul” attitude toward falls.

THE ASSOCIATION BETWEEN SELF-RATED HEALTH AND CHANGES IN GAIT SPEED OVER TIME AMONG OLDER PERSONS

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Background: Whereas poor self-rated health (SRH) has been found to be associated with subsequent functional disability, whether worse ratings of self-rated health are independently associated with objectively measured lower extremity dysfunction is largely unknown. We evaluated the association between SRH and change in gait speed, an objective indicator of lower extremity performance, among older persons. Methods: Participants (N=754) were evaluated at 18-month intervals for 72 months. SRH was categorized as Excellent/Very Good, Good, and Fair/Poor. Participants walked 10 feet forward and 10 feet back at a rapid pace, with gait speed defined as normal (≤ 10 seconds) and slow (> 10 seconds). Generalized multinomial logit models, adjusted for demographic, biomedical, and psychosocial factors, and activities of daily living, evaluated the association between SRH and the likelihood of six possible transitions (from normal or slow gait speed to normal gait speed, slow gait speed, or death) over time. Results: Compared with those reporting Excellent/Very Good SRH, participants reporting Fair/Poor SRH were more likely to transition from normal to slow gait speed (OR=2.08; 95% CI:1.35-3.21) or to death (OR=2.19; 95% CI:1.01-4.74) than to maintain normal gait speed. SRH was not associated with a transition from slow to normal gait speed or to death over 72 months. Conclusion: Our results suggest that self-rated health is associated with the development of, but not with recovery from, lower extremity dysfunction, among older persons. This relationship may be indicative of an intermediate step that precedes disability in basic activities of daily living and mortality.

OLDER ADULTS' PHYSICAL ACTIVITY AND YEARS OF LIVING IN THE COMMUNITY AT-LARGE

Z. Wang, *Texas A&M University, College Station, Texas*

Background: Physical activity among older adults can bring significant health benefits, and thereby reduce societal demands for institutional long-term care. This research examines the relationship between older adults' years of living in the community at-large (general communities where most people live) and their physical activities in nearby outdoor environments, including yard activities (yard work, gardening, and walking on residential sites) and neighborhood walking. Methods: This cross-sectional study surveyed 168 older adults in eleven assisted-living facilities in TX about their age, facility stay, and physical activities at the site and neighborhood levels before moving to assisted-living facilities. The survey instrument was developed by incorporating previously validated or tested questions. ANOVA tests were used to estimate older adults' years of living in the community as a function of their physical activities. Results: The duration of older adults' yard activities per occurrence was found to be significantly associated with their years

of living in the community ($p \leq 0.05$). The number of years in older adults who engaged in yard activities at least 1 hour/ 10 minutes to 1 hour/ less than 10 minutes per occurrence was 85.35/ 82.52/ 81.1 on average. The frequency of yard activities and the frequency/duration of neighborhood walking were found to be un-significant in predicting the years. Conclusion: Physical activity is associated with older adults' years of living in the community at-large. More empirical studies are needed to further understand the interactive roles of physical activity in promoting older adults' years of living in the community.

PILOT STUDY OF USE OF A Pedometer TO MONITOR PHYSICAL ACTIVITY IN OLDER ADULTS

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BACKGROUND: Walking is an important physical activity (PA) providing health benefits to older adults. However, methods of monitoring walking, particularly characteristics of steps, have not been well studied. PURPOSE: To conduct preliminary tests of the reliability and validity of pedometer use by older adults living independently. METHODS: Step counts along a 10 m line were determined by observation and pedometer for thirty-one older adults living independently in senior apartments and retirement communities. Each individual then completed a 7-day step count using a pedometer, a PA diary, and a self-reported PA questionnaire. FINDINGS: There was no significant difference in steps measured by observational count and pedometer. Average walking speed was 1.28 m/s, and average step length was 56 cm. Cronbach's alpha coefficients for 7-day pedometer records ranged from 0.77 to 0.90. Number of steps recorded by pedometers was significantly correlated with self-reported walking distance and amount of leisure time PA, but not with household activity. Pedometer step counts were somewhat, but not significantly, higher in individuals who reported normal blood pressure, normal BMI, and no prescription drugs, than in other individuals.

OLDER AND YOUNGER ADULTS' PERCEPTIONS ABOUT NON-MOTORIZED TRANSPORTATION AND A SOCIAL MARKETING CAMPAIGN TO PROMOTE CYCLING AND WALKING: A QUALITATIVE STUDY

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Promoting physical activity in adults remains an important challenge in preventing obesity and its related diseases; cycling and walking in one's own neighborhood can play a significant role in the total amount of physical activity in which a person participates. Neighborhood-based social marketing programs may be helpful at increasing physical activity in one's own neighborhood, but may be limited by residents' perceived physical, social, and psychological barriers. To investigate this, we conducted a qualitative study of 48 residents of a neighborhood in central Columbia, Missouri where a social marketing campaign, “Neighbors on the Go” (NOG), had been recently completed. We used a purposive sampling frame to conduct semi-structured interviews of adults over 50 years-old who opted into the program ($n=12$) and opted out of the program ($n=12$) as well as among similar adults less than 50 ($n=12$ who opted in, $n=12$ who opted out). Interviews were taped and transcribed, and text was coded to identify qualitative themes. Older and younger adults shared many similar concerns on cycling and walking in their own neighborhood. However, older adults were more concerned about personal safety and physical challenges while younger adults struggled with time management and were more willing to cycle or walk despite perceived barriers. Regardless of age, those who participated in NOG were more likely to have been physically active prior to the start of the program. Older adults participated for health benefits and educational activities while younger adults participated for social activities.

PILOTING A COMPREHENSIVE NURSING REHABILITATION PROGRAM FOR NURSING HOME ELDERLS: LESSONS LEARNED

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Hospitalization with its accompanying bed-rest and immobility puts frail elders at serious risk for decline in activities of daily living (ADL) and physical functioning that often precipitates nursing home placement. This is a significant health care concern because 44% of nursing home admissions come directly from hospitals. To address the complexity of promoting post-hospitalized frail elders' physical functioning, a 4- to 8- week Comprehensive Nursing Rehabilitation Program (CNRP) was developed to promote the physical functioning of moderately frail post-hospitalized nursing home residents. It incorporated three interventions: Performance Interventions (fostering daily mobility), Capacity Interventions (improving strength and balance), and Facilitating Interventions (providing education, support, and stress management). The pilot study aimed at the following: (a) to examine the feasibility of implementing the CNRP in a nursing home setting, (b) to obtain feedback necessary to refine and strengthen the CNRP, (c) to determine the effectiveness of recruitment procedures, and (d) to examine the preliminary efficacy. We used a longitudinal design with an experimental group and a nonequivalent comparison group. A convenience sample of 24 subjects was recruited. Their physical functioning was assessed at baseline, 4 weeks, and 8 weeks. The Wilcoxon Matched-Pairs Test was used to test for differences. We found that: (a) the intervention group believed that the CNRP improved their physical functioning, (b) the CNRP was easily implemented in nursing homes, (c) a significant improvement in ADLs between the pre- and post-test scores ($p < 0.05$) in the CNRP group, and (d) many potential subjects declined to participate in a voluntary CNRP.

SQUARE-STEPPING EXERCISE AS AN AUTONOMOUSLY ORGANIZED EXERCISE FORM FOR OLDER ADULTS

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Square-stepping exercise (SSE) has been recently developed as a novel exercise form for older adults. Participants simply walk along a thin mat partitioned into 40 squares (25 cm each) arranged in 4 rows; they are also required to memorize the step patterns demonstrated by a leader prior to each stepping. The exercise improves fall risk factors, as confirmed through our two studies lasting 3 months. Since the end of the first study, the participants have voluntarily continued SSE for 4 years, once a week, without any supervision. Those in the second study have also continued for 3 years. In the current study, we intend to determine the reasons that they have continued the exercise. Participants in this study were those who attended the previous studies and have continued SSE for 3 or 4 years ($n = 31$, currently aged 69-77 years). They were individually interviewed by one of the authors for 30 minutes. Qualitative analyses showed that "enjoyment of communication," "fall prevention," and "health improvement" were major common reasons. Features such as the provision of brain teasers for remembering step patterns, the motivation for people to challenge difficult patterns, and the need for no special equipment were the reasons specified to SSE. No adverse events, such as falls or episodes of fear, were experienced during the exercises. Of the participants, 2 voluntarily set up another SSE class in a community hall for their friends and have organized it for 3 years. Thus, SSE could be used as a continuable, voluntarily organized, and supervision-free exercise form.

ASSOCIATIONS BETWEEN PERCEIVED BARRIERS AND PHYSICAL ACTIVITY IN OLDER RURAL WOMEN

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Background: The role of physical activity (PA) in preventing chronic disease, including type 2 diabetes, obesity, and cardiovascular disease, is well established. However, in 2007 39.3% of U.S. adults 65+ did not meet PA recommendations. Rural areas in the U.S. have disproportionately greater rates of chronic disease, obesity, and physical inactivity. While substantial research supports the influence of individual and environmental factors on PA in urban and suburban areas, limited research has examined these factors as facilitators and/or barriers for PA in rural settings. **Purpose:** The purpose of this study was to examine the relationships between perceived PA barriers (environmental, safety, and individual level: planning and psychosocial) and PA in a rural sample of older women. **Methods:** Valid and reliable self-report surveys were completed by older adult women ($n=90$, mean age=68.8 years) residing in one of two rural counties in the southeastern U.S. Analyses were computed using SPSS 16.0. **Results:** Participants were predominantly African American (61%); 62% were overweight, obese, or morbidly obese ($BMI \geq 25$). Preliminary bivariate analyses revealed significant, inverse relationships between PA and both individual level barriers (planning and psychosocial) and age ($p < .01$). Perceived safety and environmental barriers and self-efficacy were not significant. Regression analysis also revealed individual level barriers ($p=.047$) and age ($p=.013$) as significant in the model ($R^2=.17$, $p=.007$). **Conclusion:** Although safety and environmental factors have been hypothesized as significant barriers in rural PA engagement, this study suggests the importance of individual level barriers for PA behavior in older adults.

QUALITY OF LIFE AND FUNCTION IN OLDER ADULTS WITH ACUTE LEUKEMIA: A PHYSICAL ACTIVITY PILOT INTERVENTION

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Acute myelogenous leukemia (AML) is largely a disease that affects older adults who have lower survival rates and worse functional outcomes than younger patients. Further, treatment for AML with a lengthy hospitalization has been linked to poor quality of life and substantial deconditioning. Previous research in other disease groups suggests that physical activity is beneficial for physical function, treatment-related symptoms, and quality of life in older adults. Research studies on behavioral interventions in older adults with AML are timely and needed. This prospective pilot study tested the effectiveness of a four week physical activity intervention in adults ≥ 50 years of age hospitalized for AML chemotherapy on physical function and quality of life. Twenty-four participants (M age = 65.1 years) were scheduled to participate in 3 sessions per week that consisted of walking, strength and flexibility exercises. All assessments were obtained at baseline, upon completion of intervention, and upon readmission for consolidation chemotherapy. General linear mixed models were used to examine changes in outcomes over time. Negative affect and depression decreased significantly ($p < .05$), while health-related quality of life (FACT-Leukemia) significantly increased ($p < .01$). Specific to physical function, both the physical and the functional well-being subscales of the FACT significantly increased ($p < .05$). No decline was observed for the Short Physical Performance Battery (SPPB) or grip strength at follow-up. Physical activity shows promise for older acute leukemia patients undergoing inpatient treatment to enhance emotional functioning, decrease self-reported functional impairment, and maintain performance-based function in this understudied patient population.

FEASIBILITY OF A PHYSICAL ACTIVITY INTERVENTION FOR OLDER ADULT INPATIENTS WITH ACUTE LEUKEMIA

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Acute myelogenous leukemia (AML) largely affects older adults, for whom optimal therapy is unclear. Curative treatment is associated with lengthy hospitalizations and substantial morbidity. Few interventions have been designed to improve quality of life and functional status during treatment. We tested the feasibility of a physical activity intervention to improve physical and psychological health for older adults (≥ 50 years of age) with AML undergoing induction chemotherapy. The four-week (12 session) individualized inpatient exercise intervention included stretching, walking, and strength exercises. Self-report questionnaires (quality of life, physical function) and physical performance tests were administered at baseline, upon completion of intervention (week 5), and post-initial hospitalization (weeks 9-13). Feasibility measures included recruitment, retention, number of exercise sessions completed, and barriers to participation. Among 58 eligible inpatients, 24 enrolled (41.4%). The mean age was 65.1 (SD 7.8), 62.5% were female, and 27.3% had unfavorable tumor biology. 88% of enrolled participants completed baseline measures; 81% attended ≥ 1 exercise sessions, and 52% completed post-intervention assessment. The mean number of exercise sessions attended was 2.7 (range 0-8, SD 2.4). Primary reasons for missed sessions were "feeling poorly" (75.7%) or discharged (11.8%). Among baseline characteristics including quality of life, functional and clinical parameters, only higher Short Physical Performance Battery score was associated with greater number of exercise sessions attended ($p=0.03$). In this cohort of hospitalized older cancer patients receiving chemotherapy, recruitment to an exercise intervention was feasible. However, future interventions will require increased flexibility to maximize participation.

CORRELATES OF PHYSICAL ACTIVITY PARTICIPATION IN COMMUNITY-DWELLING OLDER ADULTS

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We examined socio-demographic and health factors in relation to engagement in three types of physical activity, as well as the role of gender in activity. We used 686 community-dwelling participants from Wave IV (2002) of the Americans' Changing Lives Study who were 60-95 years of age and 70% female. Binary logistic regression was used to examine level of activity (low/high) in gardening/yard work, walking and active sports/exercise as a function of age, gender, race, marital status and educational level, functional health, activity limitations due to health, BMI and depressive symptoms. Male gender, being married, and better functional health were associated with significantly greater odds of performing gardening/yard work ($p<.05$). Male gender, better functional health, and lower BMI were associated with greater odds of walking ($p<.05$). Increasing age, male gender, higher education, and better functional health were associated with greater odds of engaging in sports/exercise ($p<.05$). Variables accounted for 18% of the variance in gardening/yard work, 14% in walking, and 12% in sports/exercise. Subsequent analyses yielded an interaction of functional health by gender in sports/exercise participation ($p=.06$), suggesting that participation in sports and exercise may be more influenced by functional health in men than in women. Gender and functional health appear to be particularly important for overall physical activity participation, which may be useful when designing interventions. However, given that other variables correlated with only some types of activity, attention to different subgroups may be needed in order to maximize the effectiveness of efforts to increase participation in specific activities.

BODY WEIGHT AND NUTRITIONAL CHANGES AMONG ELDERLY PARTICIPANTS OF A COMMUNITY LONG-TERM CARE PROGRAM

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Nutrition is a critical component of healthy aging. Poor nutrition leading to both unintentional weight loss and obesity may increase the risk of frailty and other disabilities in older adults. Improper nutrition has also shown to elevate the risk of institutionalization. We evaluated similarities and differences in nutrition and BMI status among individuals participating in a Community Long-Term Care (CLTC) program in 1996 ($n=2,639$) and 2002 ($n=3,037$). Data from both cohorts were obtained and examined for a period of approximately 6 years or until their exit from the program. In both cohorts, about 73% of participants were women, 51% white, 52% with eighth grade education or less, 22% married, with age at enrollment slightly higher in the 1996 cohort (mean 73, SD ± 15.9). Among those 65 years of age or older, the percent of CLTC clients that were overweight or obese at enrollment increased from 43% in 1996 to 51% in 2002, with the latter cohort having 1.37 (95% CI 1.21, 1.56) times higher odds of being overweight or obese. Near enrollment, those in the 2002 cohort were more likely to have gained 10 pounds within the past 6 months without intent than those in the 1996 cohort ($p<.022$). Interestingly, participants in the 2002 cohort were more likely to not eat enough fruits, vegetables, and milk products per day (all $p<.001$). In addition, they were more likely to suffer a wasting disorder ($p=.003$). Results suggest the need to design and implement tailored nutritional interventions to promote healthful behavior changes.

RISK FACTORS FOR COMMUNITY DEATH AND NURSING HOME ADMISSION IN A COMMUNITY LONG-TERM CARE PROGRAM

C.N. Porter, R. Liu, D. Davis, *University of South Carolina, Columbia, South Carolina*

Long-term care services are vital components of the healthcare system. As more individuals require these services, the healthcare system will potentially be strained. This study presents analyses of two cohorts of participants in a Community Long-Term Care (CLTC) program. The two cohorts consisted of new program enrollees in 1996 and 2002. Each cohort's data was examined for a follow-up period of up to approximately 6 years or until exit from the program. The two cohorts were similar in terms of their demographics. Survival curves indicated longer times to community death and nursing home admission for the 2002 cohort. Regression models were adjusted for cohort year, age group (<65 vs. $65+$), race, gender, marital status, and level of educational attainment. Those who were <65 years of age, married, and with less than a high school education were at greater risk for community death. The risk of community death was also 35% ($p<0.0001$) higher for those who were underweight compared with those of normal weight. Other indicators for risk of community death included factors related to nutritional health, such as use of dietary supplements, weight loss, and wasting. Risk of nursing home admission was higher for whites and those with Alzheimer's disease. Interestingly, obesity exhibited a protective effect; obese persons were at lower risk of nursing home admission than normal weight individuals (HR=0.81, $p=0.01$). Results indicate that the influence of BMI and nutrition on community death and nursing home admission requires closer examination as individuals seek long-term care services.

TESTING A THEORETICAL MODEL OF ACTIVITY, DISABILITY, AND QUALITY OF LIFE IN LONG-TERM CARE RESIDENTS

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Assisted (ALF) and independent (ILF) living facilities represent the fastest growing types of residential care for older adults. Little is known about those factors associated with the prevention and attenuation of age-related declines and the consequent impact on quality of life (QOL) among facility residents. 106 older women and men residing in 9 ALFs and 4 ILFs completed measures of physical activity, self-efficacy, functional limitations and disability, and QOL. Participants also wore an accelerometer for 7 days and completed the Short Physical Performance Battery. Demographic and general health information was also collected. A series of path models within a covariance modeling framework were used to test sequential hypothesized models. Results indicated that individuals who were more physically active were more efficacious ($\beta=.22$) and demonstrated better functional capacity ($\beta=.24$), and consequently, reported fewer functional limitations ($\beta=.40$, $\beta=.21$, respectively). Although self-efficacy, functional performance, and functional limitations were hypothesized to influence disability, only self-efficacy was significantly associated with disability ($\beta=.39$). Finally, disability was significantly associated with QOL ($\beta=.32$). Alternative tested models are presented and discussed. Results from this study suggest that self-efficacy plays a pivotal role in formulating perceptions of disability, and as such, should be considered in models of function and disability. To our knowledge, this is the first study to examine a theoretical model of the relationships underlying disability in the context of physical activity. Future research examining the nature of these associations and the implications for QOL among older adults is needed.

MOBILITY AND COGNITIVE FUNCTIONING: CAN SOCIOECONOMIC POSITION MODERATE THIS ASSOCIATION?

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Physical function has been associated with cognitive function in older adulthood. We used 877 participants from SWEOLD, a nationally representative study of individuals 77+ years of age living in Sweden, to examine the association between mobility limitations and cognition. We also tested occupational status as a modifier. An abridged, 11-point version of the Mini-Mental State Examination was administered in-person in 1992 or 2002. Mobility, measured with three items indicating difficulties with walking, running, and going up-and-down stairs, was assessed concurrently with cognition and in 1968. Ordered logistic regression adjusted for age, sex, education, time from baseline to follow-up, occupational status, and health indicators at follow-up (self-rated health, vascular health, and depressive symptoms) indicated that mobility difficulties at baseline ($\beta=-0.19$, $p<.001$) and at follow-up ($\beta=-0.24$, $p<.001$) were independently associated with lower level of cognition at follow-up. The association between mobility at follow-up and cognition was modified by occupational status ($p<.05$) such that the association was significant among former manual workers ($n=518$, $\beta=-0.34$, $p<.001$) but not non-manual workers ($n=359$, $\beta=-0.11$, $p=.275$). Indicators of childhood environment (parents' education, father's socioeconomic position, conflicts with family, and financial difficulties) did not mediate these results. Results were replicated with cognitive impairment as the outcome, determined as scoring one standard deviation below the mean (n impaired=129). Factors associated with non-manual occupation may moderate the association between mobility limitations and cognition in advanced old age.

SESSION 1120 (SYMPOSIUM)

SOCIOECONOMIC HEALTH DISPARITIES: NEW MEASURES, NEW INSIGHTS?

Chair: D. Alley, *University of Maryland, Baltimore, Maryland*
Discussant: J. Kelley-Moore, *Case Western Reserve University, Cleveland, Ohio*

Socioeconomic health disparities are well-established: older adults with lower income and education and lower status occupations have poorer health and a higher risk of mortality. However, traditional measures of socioeconomic status (SES), typically relying on a single measure of income, education, and/or occupation, may be inadequate, especially in poor and older populations. These measures are limited both practically, due to problems such as income underreporting and limited information on educational quality, and theoretically, as they do not incorporate lifecourse processes of change in SES. Furthermore, they have limited usefulness in developing interventions to reduce old age health disparities. The purpose of this symposium is to highlight research examining health disparities using novel measures of SES and to determine whether such measures enhance our understanding of the processes leading to health disparities. First, Alley and colleagues examine associations between material resources (housing, food, and health care) and health and functional declines. Second, Thorpe and colleagues use indicators of poverty status, reading level, income inadequacy, assets, and home ownership to examine race and socioeconomic differences in functional decline. Next, Ferraro and colleagues compare health status among older women with different occupational prestige trajectories. Finally, Crimmins presents data using individual, household and community indicators of disadvantage among older people in developing countries. These studies, utilizing longitudinal data, diverse populations, and novel measures to examine health disparities, will provide important information about the utility of more refined measures of SES and the processes through which SES affects health.

MATERIAL RESOURCES AND POPULATION HEALTH: DISADVANTAGES IN HEALTH CARE, HOUSING, AND FOOD AMONG ADULTS OVER 50

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Material resources (goods and services that improve one's standard of living) have been proposed as critical determinants of population health, and unequal distribution of these resources may contribute to health disparities. We examined associations between housing, food, and health care disadvantage and major declines in self-rated health and walking ability in the Health and Retirement Study, a prospective panel representative of U.S. adults over age 50 ($N=15,441$). Disadvantages in health care ($OR=1.39$, 95%CI:1.23-1.59), food ($OR=1.69$, 95%CI:1.29-2.22), and housing ($OR=1.20$, 95%CI:1.07-1.35) were independently associated with declines in self-rated health, while only health care ($OR=1.43$, 95%CI:1.29-1.58) and food ($OR=1.64$, 95%CI:1.31-2.05) disadvantage predicted incident walking limitations. Participants experiencing multiple forms of material disadvantage were particularly susceptible to worsening health and functional decline. Controlling for material disadvantage attenuated relationships between Black race, poverty, education, and health declines. Material disadvantages appear to uniquely contribute to socioeconomic health disparities, beyond the contributions of education and income.

HEALTH CONSEQUENCES OF WOMEN'S OCCUPATIONAL MOBILITY OVER THREE DECADES: IS MOBILITY ALWAYS HARMFUL, EVEN IF UPWARD?

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Objectives: This research examines the relationship between occupational mobility and women's self-rated health over 36 years. Given inconsistencies in prior research, we assess whether any form of occupational mobility—upward or downward—is deleterious to health. **Methods:** Using the National Longitudinal Survey of Mature Women, we examine the effect of mobility on health using two measurement approaches: (a) changes in occupational prestige and (b) perceived work trajectories. **Results:** We find no evidence that upward occupational mobility is harmful to health, but consistent evidence that downward occupational mobility compromises health—and the effect is stronger among Black than White women. Also, effects are stronger when measured with perceived work trajectories than with change in occupational prestige. **Discussion:** Although upward occupational mobility is challenging, we did not find any harmful effects. The findings also draw importance to women's interpretation of their work trajectories as critical to long-term health and well-being.

RACE, SOCIOECONOMIC RESOURCES, AND LATE LIFE FUNCTION AND DECLINE: FINDINGS FROM THE HEALTH ABC STUDY

R.J. Thorpe, *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

We examined associations between race, socioeconomic status (SES) and function in 2,538 non-disabled black (39%) and white, men (47%) and women aged 70-79 participating in Health ABC. SES measures included education, poverty status, reading level, income inadequacy, assets, and home ownership. At baseline, blacks were more likely to report diminished walking ability (men: OR=1.40, 95% CI: 1.04-1.88; women: OR= 1.56, 95% CI: 1.18-2.06) and had slower walking speed (men: 1.15 vs. 1.27m/s, women: 1.05 vs. 1.17m/s; $p<.001$ for all), independent of age, site, and SES indicators. After 5 years, accounting for age, site, baseline function and SES factors, race was unrelated to functional decline. Although SES differences did not completely account for race-related disparities in functional capacity in functionally intact men and women, SES factors, particularly education and income, appeared to modify race-related differences in functional decline over five years.

HEALTH DISPARITIES IN CHINA, INDONESIA, BOLIVIA, AND MEXICO

E. Crimmins, S. Vasunilashorn, F. Wheaton, S. Davarian, *University of Southern California, Los Angeles, California*

In countries where education is low, few people work in the market economy, there is limited access to medicine or everyone has access to the same medical care, we would expect socioeconomic health differentials at the older ages to be smaller and even reversed in some cases. To test this hypothesis we examine health differentials using multiple indicators of socio-economic well-being that characterize the individual, the household and the community. Indicators include the structure of the home and its amenities like plumbing facilities and water availability. Community indicators include means of subsistence, jobs in the non-agricultural sector and medical facilities. These data come from new surveys of national populations in Mexico and Indonesia (the Mexico and Indonesia Family Life Surveys); a new representative survey of two provinces in China (the China Health and Retirement Survey); and an anthropological study of the health and well-being of a traditional population in Bolivia.

SESSION 1125 (POSTER)

TECHNOLOGY FOR A BETTER LIFE

DEALING WITH VISION LOSS - COVERING THE PERSPECTIVES OF PARTICIPANTS AND TRAINERS IN LOW VISION INTERVENTION

I. Himmelsbach, *Goethe University, Frankfurt, Germany*

Age-related Macular Degeneration (ARMD) is the main cause for severe visual impairment in western countries. As a consequence intervention and rehabilitation programs gain in importance. Intervention research is predominantly present in quantitative follow-up designs concentrating on the change of outcomes in *participants*. This study used a qualitative approach for investigating different programs for elderly visually impaired as well from the perspective of trainers ($n=5$) as from the perspective of participating elders ($n=15$). The study is based on semi-focused interviews which were analyzed following the methodological paradigm of Grounded Theory. The analyses of those who are considered professional experts and of individuals who suffer from ARMD were conducted as case-based within and between group comparisons. The contribution will report those categories which show *how* construction of meaning is relevant for (un)successful training processes. These meanings in the domains of Facing Vision Loss and Biography, Setting, Educational Forms and Phases may explain the importance of considering both perspectives in intervention research. Within group comparisons of participants reveal coping with vision loss as a continuous dynamic between competence and deficit that challenges adaptational and learning processes of persons with a progressive eye condition. Whereas the within group comparison of experts allow for a better understanding of how underlying assumptions or views may drive certain professional agendas. The potential benefit of such insights is that they can be used to increase mutual understanding and exchange between the various experts in the field, an aspect that is still weak to nonexistent in most settings.

TRANSITIONAL REHABILITATION USING SELF-MANAGEMENT TECHNIQUES (TRUST) IN A SKILLED NURSING FACILITY

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Patients over the age of 65 with multiple morbidities are surviving cardiac events and roughly 30% require transitional skilled nursing facility (SNF) services. Cardiac rehabilitation (CR) is available to assist with recovery and the benefits are well known. Unfortunately, older adults that use a SNF attend outpatient CR at lower rates than others. The purpose of this pilot study is to test the feasibility, safety, and efficacy of a novel SNF-based CR program, "Transitional Rehabilitation Using Self-management Techniques (TRUST)". TRUST CR is a family-focused intervention that includes progressive low intensity walking and education on self-management skills to facilitate recovery and promote future participation in a CR program. In this pilot study, a quasi-experimental two-group design was used. Participant mean age was 74.5, 85.3% were female and 100% lived with a family member. Recruitment and intervention success was limited by reports of extreme fatigue and difficulty meeting with family. At baseline, the usual care had higher levels of depression than the intervention group. At discharge the intervention group had higher levels of outcome expectancy (t -test 2.1, $p<.05$) than the usual care group. At 6 weeks, the groups differed in CR attendance but not in exercise maintenance (number of steps) and self-efficacy. The majority of participants were satisfied with the intervention. The innovative intervention has the potential to empower the patient-family dyad to bridge the transition of care from hospital to SNF to home to CR by the enhancement of self-management skills.

"I NEVER HAD TO STUDY": AN ANTHROPOLOGICAL STUDY OF OLDER ADULTS' TECHNOLOGY LEARNING PROCESSES

M. Harrod, *Wayne State University, Detroit, Michigan*

Within the past decade, a new field of research known as "gerotechnology" has emerged to study the use of technology among older adults. The emergence of this multi-disciplinary specialty implies that older adults have special needs when learning and using technology. While the goal of gerotechnology is "...to understand the underlying characteristics of the aging human in their social context (the biopsychosocial model) in order to best develop technological innovations," (Burdick and Kwon, pp. xvii-xviii), this important topic remains understudied. As Selwyn, Gorard, Furlong and Madden state, "the information [technology] society is also an ageing society," (2003, p. 562). This ethnographic study specifically examined the creation of "successful" computer users within an older-adult oriented computer learning center. Practice theory (Bourdieu, 1977) framed this study in order to understand how an age-specific educational habitus comes to be created, maintained and supported through a specific teaching approach. Study aims included documenting the various learning processes within the learning center and how these processes had to be negotiated and accommodated from both the student and instructor perspectives. Data collection in this year-long study involved participant-observation (N=60) and formal and informal interviews (N= 24). Findings suggest that the success of the learning process is not solely dependent on learning the technical, instructional material, but also on being able to negotiate and benefit from the social interactions that occur within the computer center including demonstrating how to use the skills learned to represent acquisition of various forms of culturally prioritized capital.

RESULTS FROM A STUDY OF INTRA-ORGANIZATIONAL DIFFERENCES IN WEB USE

V. Laila, *University of Massachusetts Boston, Boston, Massachusetts*

The rapid evolution and proliferation of Internet may have positive implications for extending service reach by voluntary health organizations. The focus of the poster presentation is to share findings from a study to investigate the use and adoption of web-based applications at a national voluntary health organization in the United States. Specifically, intra-organizational characteristics which influence use of Internet as a mode of service delivery to family caregivers of persons with Alzheimer's Disease and related dementia (ADRD) will be identified and examined using Rogers' Diffusion of Innovation theoretical paradigm. Findings from a cross-sectional online survey (n=56) will be presented as well as results from semi-structured phone interviews with key informants and systematic evaluation of chapter websites. Discussed will be implications and suggestions for service agencies to incorporate Internet-based services for the target population.

SOCIAL NETWORKING SITES, NOT JUST FOR KIDS ANYMORE: HOW TO RECRUIT OLDER ADULTS ONLINE

A. Creamer, A.M. Stripling, M. Heesacker, *Psychology, University of Florida, Gainesville, Florida*

The purpose of this presentation is to advance gerontologists' understanding of social networking sites as fertile ground for online recruitment focused on adults and older adults. The internet has become increasingly accessible to the public, creating a large and convenient participant pool for gerontological researchers to utilize. Research conducted on online sampling has primarily provided information on the pros and cons of internet recruitment. However, little practical guidance has been provided to direct researchers in how to maneuver this new terrain, and less still that are specifically focused on targeting specific samples, such as older adults. According to the Pew Internet and American Life Project, the number of adults using online social networking sites has quadrupled in the past few years. This finding has major implications for online recruitment of adults and older adults, both of whom are erroneously

thought to have a minimal presence online and on peer-to-peer networking sites. This advancement in understanding will be accomplished by providing information about a protocol currently in use to identify participants and elicit participation in studies investigating attitudes on aging. The protocol describes how and where to locate participants based on identifying target sample demographics and the use of web etiquette to facilitate responses from members of target groups. The presentation will provide relevant information to gerontologists about adult and older adult use of electronic social networking and will provide specific instruction about engaging in online recruitment targeted toward older adults.

EXAMINING THE USE OF ONLINE HEALTH AND SOCIAL RESOURCES IN ADULTHOOD

B.L. Browne¹, S. Kohn¹, M.E. Pratarelli², *1. Psychology, Valdosta State University, Valdosta, Georgia, 2. Colorado State University - Pueblo, Pueblo, Colorado*

Much research has focused on the aspects of Internet use among the young, but relatively few studies have examined how the Internet is used by older adults. The purpose of the current study, therefore, was to address how older adults are using the Internet and other forms of contemporary information-technology (e.g., cell-phones); and how their usage and preference patterns differ relative to younger adults. The data were collected with Pratarelli and Browne's (2002) Internet Use Scale, which contained 44 items comprised of 25 Likert-scaled questions along with 19 categorical and quantitative questions. The participants were all community dwelling older adult volunteers (N=119) recruited from senior centers, religious centers, and educational facilities in the Northeastern, West Central and Southeastern USA. The sample's mean age was 70.58 (SD=7.12 Age-range=59-84 years), and consisted of 115 females and 4 males. The primary data analysis consisted of an exploratory principle components analysis (PCA) to examine the factor structure from our 25 Internet/computer usage questions. Three unique factors emerged from this analysis (KMO=.78) with Eigenvalues greater than 2. Based on these results, we found that older adults tend to use their computers and the Internet primarily for health and informational purposes while the younger age group primarily uses it for social reasons (e.g., Facebook, My Space, and games). These findings are consistent with some previous studies (e.g., Pew, 2006); but more importantly suggest that any research on the impact of the Internet and information-technology on human behavior must take into account both developmental issues and differences.

ETHICAL ISSUES AND OPPORTUNITIES IN THE USE OF WEARABLE SENSORS

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Advances in technology have recently made it possible to create wearable sensors. These devices allow health monitoring, location tracking, and other information about people who wear them, but they also involve ethical issues and policy decisions which should be considered before their adoption. This poster describes the state of wearable sensor research for elder care. It includes a brief survey of different technologies that are under development for aiding in the care and monitoring of older adults. It also discusses why these technologies may be helpful, opportunities for using these technologies, opportunities for future technology use, and issues that may arise with the use of these technologies. Specific issues addressed include privacy, loss of control, and decreased human contact. There is also the potential that health providers may seek to reduce the number of caregivers by replacing basic health monitoring with these devices. One near term opportunity presented by these devices include the ability to monitor health measures in detail remotely, allowing caregivers and relatives to view pulse, oxygen saturation, blood pressure, and other statistics that today require people under care to be

tethered to a station. Other opportunities that will develop in the near term include detecting diseases before symptoms develop, evaluating mobility through motion tracking, and detecting signs of abuse and neglect. This poster expands on these topics and provides insight into what may need to be balanced.

CHARACTER USER INTERFACE ACCEPTATION AND PLEASANTNESS IN PERSONS WITH MILD COGNITIVE IMPAIRMENT, INFORMAL AND FORMAL CAREGIVERS

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The Companionable project (Integrated Cognitive Assistive & Domestic Companion Robotic Systems for Ability & Security aims to help the elderly people) aims to help the elderly people to live as long as possible at home. One of the ICT challenges is to develop a more natural interface in order to improve the interaction between the elderly people and the system, especially elderly people with Mild Cognitive Impairment (MCI). Method: 17 elderly persons with MCI, their 13 non-professional caregivers and 31 professional caregivers participated. The aim of the study was to explore the acceptability of the character user interface in the three groups. Four different animated avatars (a woman, a man, a cartoon and a pet) were displayed and participants were asked to complete a semi-structured interview to address acceptance and pleasantness of the avatars using 10-point Likert scales for opinion, pleasantness and perceived usability, as well as open questions about qualitative aspects. The results showed that persons with MCI ($M=6.5$; $sd=2.4$) and the professionals ($M=6.2$; $sd=2$) preferred the feminine avatar meanwhile the caregivers ($M=6.4$; $sd=3$) preferred the pet avatar. Generally the most preferred avatar ($M=6.2$; $sd=2.4$) was the feminine one as the most pleasant, because she is evaluated as sympathetic, human, and friendly in most of the qualitative questions. "The study presented is being supported by the European Commission under the strategic objective "ICT and Aging" of the Seventh Framework Programme (FP7/2007-2013) under the agreement n° 216487".

EVALUATION OF TELEHEALTH IN A RURAL AND REMOTE MEMORY CLINIC

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OBJECTIVE: This study evaluated telehealth videoconferencing in a memory clinic serving rural and remote regions in Saskatchewan, Canada. **METHODS:** Pre-clinic assessment is conducted via telehealth, with the patient and family in their home community and the clinic team in the tertiary care centre where patients are subsequently seen for a full-day interprofessional assessment. Patients are randomly assigned to telehealth or in-person follow-up at 6 weeks, and then alternating at 12-week and 6-month follow-up. Rural telehealth coordinators and patients/family dyads complete questionnaires following each contact. **RESULTS:** Of the first 169 patients, 40% were male and mean age was

73 years. Alzheimer Disease was the most common diagnosis (35%). The mean distance saved by telehealth vs. in-person appointments was 426 kms/round trip. Rural telehealth coordinators rated most patients as comfortable (55.5%) or very comfortable (29.9%). There was no significant difference in mean satisfaction with telehealth vs. in-person appointments, $p = 0.158$. However, convenience was significantly better for telehealth, $p < 0.0001$. Telehealth Satisfaction Scale scores at pre-clinic and 6-months did not differ ($p = 0.152$). Patients who discontinued follow-up by 6 months had lower telehealth satisfaction scores compared to those who continued ($OR = 0.88$, 95% $CI = 0.78, 0.98$). Risk of discontinuing was 8.7 times higher when patients needed to travel ≥ 100 km to telehealth. Patients 80+ years were 5 times more likely to discontinue compared to those ≤ 70 years ($OR = 5.12$, 95% $CI = 1.15, 22.73$). **CONCLUSION:** Telehealth is a feasible and acceptable strategy for delivering services to rural seniors.

CREATIVE USE OF SENSOR/ALERT TECHNOLOGY MAY ENABLE ELDERS LIVING ALONE TO DELAY TRANSITION TO HIGHER LEVELS OF CARE: A TESTED HYPOTHESIS

R. Roush¹, C. Meriano^{2,1}, 1. *Baylor College of Medicine, Houston, Texas*, 2. *Quinnipiac University, Hamden, Connecticut*

Early research on PERS use and health outcomes (Roush and Teasdale, 1996) led to studies of how "smart home" technologies assist elders to live independently longer than otherwise might be the case (Glascock and Kutzik, 2008; Agnew, 2008). Electronic activities of daily-living reporting systems (e-ADLRS) gather data unobtrusively and report on the well-being of elders living alone. The efficacy of such a program is being studied by one of the co-authors (Meriano). Elders ($N=70$) residing in Masonicare, an ALF in Wallingford, CT, were randomly assigned to groups with and without e-Neighbor sensors in their apartments. The hypothesis tested is, due to earlier detection of problems, residents with sensors and reporting systems will experience fewer ADL decrements and possibly delayed transition to NH care over the two-year period of the study. All participants had a functional evaluation during summer 2008 using the Performance Assessment of Self-care Skills (PASS), the Mini Mental Status Exam (MMSE), and the Timed Up and Go (TUG). These assessments established a baseline of all participants. The three measures will be repeated on all 70 participants again during summer 2009 to evaluate any change in function between the two groups. Results of data analyses on the main outcomes of efficacy will be presented.

COMMUNICATION PATTERNS OF AGING FAMILIES: THE ROLE OF TECHNOLOGY IN ASSISTED LIVING FACILITIES

C.L. Vair¹, S.H. Qualls¹, M.A. Doffing¹, R. Bliesner², M.D. Williams¹, 1. *University of Colorado, Colorado Springs, Colorado*, 2. *Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

The placement of an older adult in an assisted living (AL) facility alters the role that family members undertake in the day-to-day lives of their aging loved one, including family interactions and communication patterns. Families show reciprocal support with older adults, and maintain connections within and across generations, yet older adults living in long-term care are at high risk of depression and loneliness which likely results from disconnection from previous social networks. This study assesses the impact of one device designed to facilitate communication between residents of ALs and their families. The Family Connections Service (FCS) allows AL residents to send text or photos from a one-touch digital mailbox with the assistance of residential staff. This poster reports on the patterns of interactions between older adults from three diverse community assisted living facilities and family members interfacing with their preferred technology. Data on frequency of communication, range of persons communicating with the elder, and family and staff perceptions of usability as well as measures of impact on elder and family well-being will be used. The present study describes

the initial data on the recruitment of older adults and family members and utilization launch and patterns. Findings are interpreted as demonstrating the acceptability of the technology, and the value to the families as well as the AL staff that accrues from more frequent communication with a larger range of the residents' networks.

SESSION 1130 (SYMPOSIUM)

THE ARKANSAS AGING INITIATIVE: SUCCESSFUL IMPLEMENTATION OF EVIDENCE-BASED EDUCATIONAL PROGRAMS IN RURAL COMMUNITIES

Chair: R.E. McAtee, *The University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Discussant: N. Whitelaw, *National Council On Aging, Washington DC, District of Columbia*

This session will demonstrate that evidence-based educational programs are effective in rural communities. The Arkansas Aging Initiative (AAI) is a rural network of eight Centers on Aging whose mission is to improve the quality of lives for older adults through two primary components, education and clinical care. The AAI is implementing at least two evidence-based educational programs per year on a statewide multi-site basis. These programs are developed by healthcare and educational professionals and cover topics that the target audiences identify as being important. Over the past two years, four such programs have been developed; arthritis, exercise, strokes, and fall prevention. Each program utilizes an evidence-based program and is developed with the specific audiences in mind. One is developed for the lay community of older adults and their families, one for paraprofessionals and one for healthcare professionals. Each program developed for the older adult community has several components including a PowerPoint® presentation, an ad campaign complete with flyers, TV ads, billboard ads, articles for release in local publications and approved evaluations. The professional education is done in partnership with the Arkansas Geriatric Education Center (AGEC). Participation in these statewide events has been outstanding and the results are being evaluated for satisfaction and impact. Three of the individual symposiums will review different evidence-based programs, their delivery methods and outcomes. The fourth one will review the professional programs done with the AGEC and evaluation results.

EVIDENCED-BASED HEALTH INFORMATION: HOW DOES THE COMMUNITY KNOW WHAT TO BELIEVE

C.J. Beverly, R. McAtee, *Nursing, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

A rapidly growing wealth of health care information is available to the public and an active part of consumer decision making about preventive or therapeutic interventions. The basis for informed consumer decision making is the communication of evidence-based scientific data. However, many consumers lack the ability to critically critique and understand scientific results. Guided by this concern, the Arkansas Aging Initiative developed a strategic plan to develop two evidence-based education programs targeting the community on an annual basis. A process was established to synthesize the research results for a defined health topic that was led by a team of Arkansas Aging Initiative education directors. Results of the synthesis guided the development of two evidence-based education programs annually. This presentation will examine the process and lessons learned in the development of these programs targeting older adults in Arkansas.

HEALTHY CHANGES: RESULTS FROM AN EVIDENCE-BASED DIABETIC SELF-MANAGEMENT PROGRAM

T. Horton, *AAI: South Central Center on Aging, University of Arkansas for Medical Sciences, Pine Bluff, Arkansas*

The Arkansas Aging Initiative offered the evidence-based Healthy Changes program to older adults in rural Arkansas. This program is

designed to assist older adults in the day-to-day self-management of diabetes by focusing on the role nutrition and physical activity play. Emphasis is placed in setting achievable goals, problem solving and better preparation to work with healthcare providers. This was the first attempt by the AAI regional sites to offer a multi-session program in a rural setting and participation was voluntary. Although several more older adults participated in the program, only 29 participants completed the pre-test and only 13 completed the post-test. Barriers to implementation and lessons learned will be discussed along with the findings based on comparison of the data obtained through pre and post tests.

HIPPS: AN EVIDENCED BASED FALL PREVENTION PROGRAM FOR RURAL COMMUNITY DWELLING OLDER ADULTS

K.A. Packard, *University of Arkansas for Medical Sciences, Hot Springs, Arkansas*

The Arkansas Aging Initiative (AAI) partnered with Area Agencies on Aging to offer an evidenced based Fall Prevention program in rural Arkansas. This "Home Injury Prevention Program for Seniors" (HIPPS) was developed to teach older adults to identify risk factors and implement treatment plans to prevent falls and injuries. Participants were provided with a home safety checklist book and participated in an interactive forum on how to safely change their home environment to reduce the risk of falls. Participants in the program evaluation were volunteer community dwelling older adults. To measure the outcomes, the Falls Free Questionnaire was completed by consenting participants prior to the HIPPS educational program, followed up by a phone call asking the same questions six months after the HIPPS educational program. Comparison data will be presented.

EVIDENCE-BASED EDUCATIONAL PROGRAMS FOR RURAL HEALTHCARE PROVIDERS: STRATEGIES FOR SUCCESS

R. Chernoff, 1. *GRECC, Central Arkansas Veterans Healthcare System, Little Rock, Arkansas*, 2. *AGEC, University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Providing education to health providers who live in rural communities is a challenge due to the distances they are often required to travel to access programs. Professional education is achieved through several methodologies including live interactive video teleconferences which are digitally recorded, edited and produced as DVDs with supporting handout material, post-tests, participant profiles, and evaluation forms, all of which can be accessed on-line. Continuing education symposia are offered in Little Rock several times annually but selected programs are developed to address the specific topics chosen by the rural Centers on Aging education directors and offered at 4 rural sites per year. Self-study programs offer another option for rural-based practitioners. All professional education programs are evaluated at the completion of the program and then 90 days after the event to assess the clinical impact of the continuing education program. Attendance at programs offered at rural sites has been excellent.

THE IMPACT OF THE EVIDENCE-BASED ARTHRITIS FOUNDATION SELF HELP PROGRAM IN RURAL SETTINGS

R. Alcon, B. Parker, T. Williams, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

The Arkansas Aging Initiative (AAI) partnered with the Arthritis Foundation, Arkansas Chapter to offer their evidenced-based self-management program "The Arthritis Foundation Self-Help Program" in some very rural areas of Arkansas. This is a six week program designed to help participants: 1) Become active members of their health-care teams; 2) Work better with their health-care providers; and 3) Handle the day-to-day challenges of the disease. This evidenced-based program included pre and post questionnaires which were administered to all par-

ticipants on the first and last day of class. It covered such areas as pain management, general health, ADLs, quality of life and physical activity. The results are based on the comparison of 41 participants' pre and post questionnaires from 6 rural sites. Results report significant differences in several areas after participation in the self-help program. This program, typically offered in more urban areas, can still be effective when offered to older adults in very rural settings.

SESSION 1135 (SYMPOSIUM)

THE ROLE OF GENETIC AND LIFESTYLE FACTORS FOR COGNITIVE CHANGE IN ADULTHOOD AND OLD AGE

Chair: *B.J. Stiehler, Human Development-Family Studies, Penn State University, University Park, Pennsylvania*

Discussant: *R.S. Wilson, Rush University Medical Center, Chicago, Illinois*

Lifespan research has long been interested in the heterogeneity of cognitive aging and the multitude of factors that may account for such interindividual differences in cognitive performance and change. One long-standing promising approach is to target genetic factors: APOE, COMT, or BDNF as risk factors for cognitive decline. Another approach has targeted lifestyle and psychosocial variables such as activities and well-being as possibly moderating cognitive change. Our objective in this symposium is to bring together a collection of empirical work from these research traditions to showcase contemporary approaches to study the role of genetic and lifestyle factors for cognitive change across adulthood and old age. Anstey and colleagues report differential predictive effects of health behaviors, medical conditions and APOE for cognitive change in middle-aged and old-aged participants of the PATH Through Life Study. Li and colleagues report evidence for the hypothesis that the magnitude of genetic effects (BDNF Val66Met polymorphism) on episodic memory is greater when brain resources are reduced, such as old age. Small and colleagues report that the COMT genotype relates to lower cognitive performance and that such genotype-related cognitive deficits were exacerbated among cancer survivors treated with chemotherapy. Stiehler and colleagues demonstrate that level and change differences between APOE e4 carriers and APOE e4 non-carriers on measures of fluid and crystallized abilities cannot only be detected in old age, but already commence in middle age. The discussion by Wilson integrates the four papers, highlights their theoretical and methodological contributions, and considers research opportunities that promises further understanding.

MEDICAL CONDITIONS, SMOKING AND APOE AS PREDICTORS OF SUBTLE COGNITIVE CHANGE IN MID-LIFE AND EARLY-OLD AGE: THE PATH THROUGH LIFE STUDY

K. Anstey, N. Cherbuin, R. Burns, *Australian National University, Canberra, Australian Capital Territory, Australia*

Health behaviors, medical conditions and APOE were evaluated as predictors of cognitive decline in narrow age cohorts in their 40s ($n = 2485$) and 60s ($n = 2160$) with 4-year follow-up. Population level analyses showed improvement in memory but no change in processing speed in the 40s, while the 60s declined in both domains. Subgroup analyses showed that females in their 40s reporting a history of cancer, stroke, smoking or head injury declined in processing speed. Males in their 40s reporting history of stroke declined in speed and memory. In the 60s, participants reporting history of cancer or diabetes declined in both speed and memory. Head injury predicted memory decline in males and female smokers declined in processing speed. APOE had minimal associations with decline. We conclude that smoking and specific medical conditions (or their treatments) increase the risk of cognitive decline in mid-life, with women showing greater vulnerability.

THE INFLUENCES OF THE BDNF VAL66MET POLYMORPHISM ON EPISODIC MEMORY IS MODULATED BY AGING

S. Li¹, C. Chicherio², L. Nyberg⁴, I. Nagel¹, T. Sander⁵, H.R. Heekeren³, U. Lindenberger¹, L. Bäckman⁶, *1. Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany, 2. University of Geneva, Geneva, Switzerland, 3. Free University of Berlin, Berlin, Germany, 4. Umea University, Umea, Sweden, 5. Cologne Center for Genomics, Cologne, Germany, 6. Karolinska Institute, Stockholm, Sweden*

The brain-derived neurotrophic factor (BDNF) is known to affect learning and memory. In a sample of 948 younger and older adults, we investigated the influence of a human BDNF gene Val66Met polymorphism on episodic memory as assessed by the serial recall task. BDNF polymorphism affected backward recall in older adults only, with any Met carriers (i.e., individuals with reduced BDNF signaling) recalling less accurately than Val homozygotes. This finding is in line with the hypothesis (Lindenberger et al., 2008) that the magnitude of genetic effects on cognition may be greater when brain resources are reduced, as is the case in old age.

CATHECHOL-O-METHYLTRANSFERASE GENOTYPE MODULATES CANCER-RELATED COGNITIVE DEFICITS

B. Small^{1,4}, K. Sharp Rawson¹, T. Hughes², L. Iser¹, H. Jim⁴, M. Andrykowski³, P. Jacobsen⁴, *1. University of South Florida, Tampa, Florida, 2. University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, 3. University of Kentucky School of Medicine, Lexington, Kentucky, 4. Moffitt Cancer Center, Tampa, Florida*

Evidence indicates that cancer survivors may be at risk for cognitive deficits associated with their cancer treatment. In the current study, we examined cognitive deficits among breast cancer survivors who were treated with radiation and chemotherapy ($n = 82$) or radiation alone ($n = 70$), as well as a non-cancer control group ($n = 123$). We also examined whether Catechol-O-Methyltransferase (COMT) genotype modified the association between cancer treatment and cognitive performance. The results indicated that COMT Met/Val and Val carriers performed more poorly than Met carriers on Digit Span and the Controlled Oral Word Associates tests. Moreover, cancer survivors who were Met/Val or Val carriers treated with chemotherapy performed worse cognitively than those treated with radiation alone. Taken together the results indicate COMT genotype is related to cognitive performance and that persons with Met/Val or Val alleles who are treated with chemotherapy may be at greatest risk for cognitive deficits.

GENETIC AND LIFESTYLE INFLUENCES ON COGNITIVE DECLINE: APOE ε4, PERSONALITY AND WELL-BEING

B.J. Stiehler, D. Gerstorf, S. Willis, K. Schaie, *Human Development-Family Studies, Penn State University, University Park, Pennsylvania*

The APOE e4 allele is a well-established risk factors for cognitive decline in old age, but less is known about its role in middle age. Our study examines level and change differences in measures of fluid and crystallized abilities for APOE e4 carriers ($n = 261$) and APOE e4 non-carriers ($n = 696$) in the Seattle Longitudinal Study from age 40 to 100. Results indicate that small differences indeed already exist in middle age and become larger in old age. Follow-up analyses will target an often overlooked question, namely if and how other factors such as personality and well-being moderate the rate of decline for APOE e4 carriers. These findings suggest that cognitive decline may be occurring earlier than typically thought for APOE e4 carriers and cognitive intervention efforts may already target middle-aged adults.

SESSION 1140 (SYMPOSIUM)

WELL-BEING IN OLD AGE: AN INVESTIGATION OF SOCIAL AND PSYCHOLOGICAL PREDICTORS

Chair: *M. Ardeit, Sociology, University of Florida, Gainesville, Florida*

Discussant: *C. Elman, University of Akron, Akron, Ohio*

This symposium investigates the social and psychological predictors of physical, social, psychological, and subjective well-being in old age. The first presentation focuses on the role of educational attainment in later life physical well-being. Longitudinal data from the nationally-representative Health and Retirement Study show that disability trajectories of middle-aged and older adults differ by educational status even after controlling for health conditions, health behaviors, and demographic factors. The second presentation utilizes longitudinal data of older adults to demonstrate the value of proactivity. Specifically, the study indicates that behavioral adaptations, such as planning ahead and marshalling support, tend to have long-term positive consequences on the preservation of social and psychological well-being in old age. The third presentation uses data from the Institute of Human Development longitudinal studies of white men and women to explore adolescent predictors of hedonic well-being (life satisfaction and warm personal relations) and eudemonic well-being (personal growth) in old age. Results show that conscientiousness and openness to experience in adolescence predict hedonic and eudemonic well-being, respectively, at age 70. The last presentation tests the effect of wisdom (measured as a combination of cognitive, reflective, and affective personality characteristics) on subjective well-being in old age in three diverse samples: a community sample of older adults, a sample of older hospice patients and nursing home residents, and a Harvard-educated sample of white men. In all three samples, wisdom tends to be a stronger predictor of well-being than the objective conditions older adults encounter, such as physical health, socioeconomic status, and finances.

EDUCATION, HEALTH, AND DISABILITY IN OLDER AGE

L.A. Wray¹, C. Chiu¹, C.L. LaCoe¹, E. Beverly², *1. Biobehavioral Health, Penn State, University Park, Pennsylvania, 2. Joslin Diabetes Center, Boston, Massachusetts*

The absence of disability is key to well-being in older age. According to a growing literature, disability increases markedly with age and age-related health conditions, as well as for women, adults with less education, and for riskier health behaviors. While providing important evidence, existing studies are limited by cross-sectional or short-term longitudinal data, as well as small or unrepresentative samples. In this study, we utilize nationally-representative HRS data in 1998-2006 for middle-aged and older adults to assess: (1) differences in age-related trajectories of disability by education; and (2) if health conditions and health behaviors explain differences. We find that education strongly effects both level of and change in disability and the education effect remains significant net of demographic and health factors. All of the health conditions and risky health behaviors increased levels of disability, some increased change in disability, but few explained the education differences in disability level or change.

PROACTIVELY: PSYCHOLOGICAL AND SOCIAL WELL-BEING IN LATE LIFE

E. Kahana¹, B. Kahana², *1. Sociology, Case Western Reserve, Cleveland, Ohio, 2. Cleveland State University, Cleveland, Ohio*

This presentation will focus on proactive options available to current and future cohorts of elderly persons to deal with normative stressors of late life. As growing numbers of older adults live longer lives, they are also likely to encounter exposure to chronic illness, disability, and social losses. Based on a theoretical framework of Preventive & Corrective Proactivity (PCP) (Kahana & Kahana, 2003), we discuss behavioral adaptations such as health promotion, planning, helping others,

and marshalling support that can diminish adverse effects of stress exposure on quality of life outcomes. Emergent behavioral adaptations such as health care consumerism and technology use will also be noted as they present new options for proactive engagement. Findings of our longitudinal study based on 561 elders support the value of adaptations such as planning ahead and marshalling support for the subsequent maintenance of both social and psychological quality of late life.

ADOLESCENT PREDICTORS OF TWO TYPES OF WELL-BEING IN OLD AGE

P. Wink, *Psychology, Wellesley College, Wellesley, Massachusetts*

Whereas some older adults derive their well being from being satisfied with life and having warm personal relations (hedonic well-being), others tie their psychological welfare to personal growth (eudemonic well-being). In the Institute of Human Development (IHD) longitudinal study of men and women, hedonic well-being at age 70 was predicted by adolescent ratings of conscientiousness indicative of an emphasis on achievement, dependability, and self-control. This relationship held even after controlling for social class in adulthood which itself was positively related to life satisfaction. In contrast, eudemonic well-being in old age was characteristic of adolescents who were open to experience (showed wide interests, insight, and valued intellectual pursuits). This relationship was moderated by adult psychotherapy use and the development of spiritual interests. The IHD findings support Carol Ryff's contention that there is more than one type of psychological well-being and that hedonic and eudemonic well-being have their own distinct developmental trajectories.

WISDOM AND SUBJECTIVE WELL-BEING IN THE LATER YEARS OF LIFE

M. Ardeit¹, G.E. Vaillant², *1. Sociology, University of Florida, Gainesville, Florida, 2. Brigham and Women's Hospital, Boston, Massachusetts*

The effect of wisdom on subjective well-being was investigated in three different samples: a community-sample of 180 older adults (mean age = 71 years), a sample of 42 older hospice patients and nursing home residents (mean age = 77 years), and a sample of 96 Harvard-educated white men around the age of 80 years. In all three samples, wisdom (measured by cognitive, reflective, and affective personality characteristics) was a consistent and relatively strong predictor of subjective well-being in the later years, even after controlling for age, physical health, socioeconomic status, economic pressure, social involvement, gender, and race. The strength and significance of the other predictor variables varied across samples. Moreover, the inclusion of wisdom in the models tended to reduce the impact of the more "objective" predictors of subjective well-being. Hence, aging well might depend more on psychosocial growth across the life course than on objective conditions in old age.

SESSION 1145 (SYMPOSIUM)

WHAT CAN WE LEARN ABOUT AFFECT AND AGING FROM STUDIES USING REAL-TIME MOOD MEASUREMENT?

Chair: *D. Isaacowitz, Brandeis University, Waltham, Massachusetts*

Discussant: *D. Almeida, Pennsylvania State University, State College, Pennsylvania*

Early studies on affect and aging asked participants at one point in time to report on their emotional experiences in general or in retrospect, thus measuring people's generalized knowledge about their emotional experiences. More recently, studies increasingly have used Experience Sampling to capture emotional experiences as they occur, or close to their occurrence, and within the context of the person's daily life, to study the nature of affective experience in older and younger adults. The focus of this symposium is on still the next generation of research on

aging and affect: studies using real-time mood measurement to put momentary affect in context, by considering how it relates to other ongoing behavioral processes, such as cognition and physiological responding. Scheibe and colleagues will use data on real-time mood measurement to test for age differences in recall memory of that experience, consistent with positivity effects in older adults' cognitive processing. Isaacowitz will consider how gaze preferences facilitate real-time mood change, and how such gaze-mood links are moderated by trait-level variables such as attention. Blanchard-Fields will use time-sampling data with converging measures to evaluate the effectiveness of older and younger adults' emotion regulation. Riediger and colleagues will add measures of arousal to momentary assessment of both affect and cognition, to evaluate what can be learned by looking simultaneously across multiple streams of real-time data. Finally, our discussant David Almeida will pull together the talks by considering the conceptual advances that can be made when methodologies allow for real-time affect assessment.

THE ROLE OF STATE AND TRAIT ATTENTION IN PREDICTING OLDER AND YOUNGER ADULTS' REAL-TIME MOOD CHANGE

D. Isaacowitz¹, S. Neupert², 1. Brandeis University, Waltham, Massachusetts, 2. North Carolina State University, Raleigh, North Carolina

Previous eye tracking research has established age differences in gaze toward emotional stimuli, with older adults looking more toward positive stimuli and away from negative ones. Such findings have been interpreted as reflecting older adults' attempts to use their information processing to regulate how they feel, in line with the predictions of socioemotional selectivity theory. Actually linking gaze preferences to mood regulation, however, requires the ability to assess mood change in real-time, and to link changes in mood to simultaneous (or preceding) attentional patterns. In this talk, I will present recent evidence showing that older adults' gaze preferences (a "state" variable) can indeed predict their mood, but that this depends on the functioning of their general attentional system (a "trait" variable). Gaze-mood change links also vary as a function of the duration of the interval of mood change. Such real-time findings clarify the mood regulatory function of age-related gaze preferences.

A MULTI-METHOD APPROACH TO STUDYING THE AFFECT-BEHAVIOR-PHYSIOLOGY INTERPLAY IN EVERYDAY LIFE: FROM ADOLESCENCE TO OLD AGE

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Age-related differences in the interplay between affective experiences, behavior, and physiology were investigated in 378 participants aged 14 to 86 years. Participants were provided with mobile phones that they carried with them in their natural environment, and that prompted participants six times a day to describe the current situation, and to report their momentary affect, affect-regulation goals and strategies, and potential affect-eliciting events. Participants furthermore completed two trials of a working-memory task. Assessments were obtained on 9 days distributed throughout 3 weeks. A subsample of 92 participants further participated in a 24-hours ambulatory bio-monitoring phase during which six additional experience-sampling assessments were obtained, and cardiovascular functioning, breathing, and physical activity were continuously monitored. We report results demonstrating age-related differences in the links between self-reported affective experiences, working-memory performance, and autonomous arousal. Implications of these findings for theoretical conceptualizations of age-related differences in affective functioning are discussed.

EMOTION RECALL AND AGING: OLDER ADULTS RECALL THE PAST MORE POSITIVELY (AND LESS NEGATIVELY) THAN YOUNGER ADULTS

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A global sense of well-being likely depends on what people remember about their past emotional experiences. Life-span changes in motivation may lead to differential memory distortions in younger and older adults. Two studies investigated whether there is an age-related positivity effect in recall of past emotions. Study 1 compared affect ratings with recalled affect one month later and found older adults overestimated their past positive affect relative to younger adults. Study 2 compared affect ratings during a week-long experience sampling phase with recalled affect and again found older adults overestimated their past positive affect relative to younger adults. In addition, younger adults overestimated their past negative affect relative to older adults. Findings thus support a positivity effect in emotion recall with aging. From a methodological perspective, the results suggest that global self-reports of affect and well-being are differently biased in younger and older adults.

EMOTION REGULATION EFFECTIVENESS AND EVERYDAY PROBLEM SOLVING IN OLDER ADULTHOOD

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Past research has showed that older adults are more effective at emotion regulation than young adults. The majority of these studies have employed self-report assessments which indicate that in comparison to young adults, older adults are more effectively context-driven in their strategy use, i.e., vary the use of emotion regulation strategies depending upon the emotional salience of the situation. These findings are corroborated by high peer ratings of strategies chosen by older adults in comparison to young adults. In addition, older adults demonstrate cognitive efficiency when regulating emotions in comparison to young adults. We used a time-sampling study approach to examine this process in real time. To further evidence of emotion regulation effectiveness we employed converging measures, both psychological and physiological, to evaluate the emotion regulation process as well as emotion-related outcomes in young, middle-aged, and older adults.

SESSION 1150 (POSTER)

BALANCE/GAIT

MAXIMUM STEP LENGTH TESTING IN OLDER ADULTS

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Background and Purpose: Maximum Step Length (MSL) has been shown to be related to balance impairment and falls risk in older adults. The purpose of this study was to obtain preliminary normative values of MSL in balance impaired and unimpaired older adult males and females for varying age groups (60-70 years; 71-80 years; 81+ years). Participants: 70 community-dwelling older adults (47 females, 23 males) participated in the study. Female participants' mean age was 72.9 ± 0.9 years and male's mean age was 76.4 ± 1.4 years. Methods: Participants reported their medical and falls history. Unipedal stance time (UST) and MSL was assessed. Balance impaired and unimpaired status was established by UST of <5 seconds or >20 seconds, respectively. Results: Significant differences in MSL were found between balance impaired and unimpaired individuals ($p < .001$). Among the 60-70 year age group, males had a significantly longer MSL than females ($p < .05$). For the two

older age groups, there were no significant differences in MSL between males and females. Additionally, balance impaired males and females did not differ significantly in MSL, however, unimpaired males had significantly greater MSL than unimpaired females ($p < .05$). Conclusion: These data, based on balance impairment and gender, will help establish MSL as a risk for falls in older adults. The ease of administering the MSL test, combined with minimal space usage and equipment may make the MSL test a useful screening tool in geriatric settings. Future studies should investigate the utility of the MSL test in predicting falls in older adults.

RELIABILITY OF THE GAIT STABILITY RATIO (GSR) IN HEALTHY COMMUNITY-DWELLING OLDER ADULTS

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With age, older adults adapt their walking pattern by slowing down and taking shorter steps. This creates a more stable walking pattern that is less effective for moving the body forward. Gait Stability Ratio (GSR) is the ratio of cadence to walking velocity and assesses the degree to which walking is stabilized in older adults. This study examined intra-rater and inter-rater reliability of the GSR. Ten healthy, community-dwelling older adults aged 69 ± 10.3 years participated. For session 1, subjects walked 3 passes of a 10-meter walkway. After a 15-minute rest, subjects completed a second session by walking 3 more passes of the walkway. The central 5-meters of the walkway were used for data analyses. Two investigators each timed the duration of the 5-meter walk and counted the number of steps taken. Cadence was calculated as the number of steps per second. Walking velocity was expressed in meters per second. GSR was calculated by dividing cadence by velocity. Values were averaged across the three walking trials in each session. Intraclass Correlation Coefficients, ICC (3,3), were used to examine inter-rater and intra-rater reliability. ICCs within raters demonstrated excellent intra-rater reliability (rater #1, ICC = 0.993; rater #2, ICC = 0.991). ICCs also demonstrated excellent reliability between raters for each of the walking sessions (session 1, ICC = 0.986; session 2, ICC = 0.951). Results of this study indicate that GSR has excellent intra-rater and inter-rater reliability and can therefore, be used with confidence when assessing gait stability in older adults.

SITTING TAI CHI: BALANCE AND MOBILITY EFFECTS ON FRAIL OLDER ADULTS IN ASSISTED LIVING

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Standing Tai Chi has documented benefits in community-dwelling older adults. Frail older adults unable to stand have rarely been studied. We evaluated balance and mobility effects of sitting Tai Chi for Arthritis (sTCA) classes, taught by certified instructors four times/week for 6 months, on frail older adults in two assisted living facilities. Eighteen participants (71% female; 85.7 mean age) attended 1 to 89 (37.5 mean) sTCA classes; 16 concurrently attended 1 to 120 (57.5 mean) pre-existing Sittercize classes offered five times/week. Balance was evaluated by the Sit and Reach Test (SRT) and standing Functional Reach Test (FRT). Mobility was evaluated by the Timed Up and Go (TUG) test components: total, sit to stand and 10-foot walk. Linear regression of baseline to 6-month difference scores for dependent variables (SRT, FRT, and three TUG components) evaluated sTCA attendance and other potential explanatory variables. Independent variables included sTCA attendance, Sittercize attendance, age, falls, and the baseline dependant variable. Only one regression model included sTCA class attendance: SRT 6-month difference = $-8.56 + .045$ sTCA attendance ($p = .022$) + $.191$ age ($p = .052$) - $.672$ baseline SRT ($p = .000$). No models included Sittercize attendance. Participants with poorer SRT improved with sTCA. While sTCA incorporates lower extremity movement, there was no significant

effect on standing balance or mobility. sTCA classes helped improve sitting balance necessary for ADLs such as dressing, feeding, and hygiene. Future research should use patient-centered and physiological outcomes rather than customary outcomes emphasizing standing balance, mobility, and falls. Funded by the H. W. Durham Foundation.

THE EFFICACY OF PHYSICAL THERAPY INTERVENTIONS FOR DIZZINESS AND THE CONVERGENT VALIDITY OF THE DIZZINESS HANDICAP INVENTORY AND THE DYNAMIC GAIT INDEX

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Introduction: Dizziness is a common problem for aging adults receiving physical therapy (PT). This study evaluates the efficacy of PT interventions for dizziness and the clinometric properties (i.e., validity) of two outcome measures commonly used in PT: the Dizziness Handicap Inventory (DHI) and Dynamic Gait Index (DGI). Methods: Twenty-three consecutive community dwelling out-patients (mean age 69.78 ± 10.16 years, 65.2% female) participated in this case series. All patients reported dizziness (mean duration 44.74 ± 79.36 months). Interventions included: gait training, therapeutic activities, and neuromuscular re-education among others. Outcome measures included the self-reported DHI and the performance-based DGI. Correlations of total and subscale scores were used to examine the convergent validity between the outcome measures at evaluation and discharge. Paired t-tests were used to examine for differences in outcome scores following PT interventions. Results: Participants at evaluation had a low perception of handicap and increased fall risk. Significant ($p < .01$) correlations ($r = -.38$ -.52) were found between the DGI and DHI total and subscales at evaluation. Participants received PT for an average of 9.43 ± 4.12 visits. At discharge participants had a lower perception of handicap and were considered safe ambulators. Significant ($p < .04$) correlations ($r = -.38$ -.44) were also found between the DGI and DHI total and subscales at discharge. There were significant ($p < .00$) differences in the DGI (mean increase = 3.35 ± 2.23) and DHI (mean decrease = 18.96 ± 9.16) after PT interventions. Conclusions: Moderate correlations between the DGI and DHI demonstrate convergent validity. Significant differences in the DGI and DHI demonstrate the efficacy of PT interventions.

SESSION 1155 (PAPER)

CANCER - PAPER SESSION

THE INFLUENCE OF CANCER ON FALLS IN COMMUNITY DWELLING ELDERLY

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Cancer survivors are living longer, and encounter physical, psychosocial, and economic impacts until the end of life. However studies examining whether a cancer diagnosis alters the rate of falls in elderly survivors are rare. This retrospective, longitudinal cohort study examined community dwelling elderly in a home based waiver program to identify if individuals with a diagnosis of cancer experience falls at a higher rate than those without cancer. The Minimum Data Set in a State in the Midwest was used to examine cancer, age, gender, race and ethnicity, poor vision, reduced ADLs, reduced IADLs, cognitive skill, incontinence, pain, or depression in 7448 individuals in the year 2007. This study found a high frequency of falls, with 2125 having a fall; and of those 38% in the cancer group had a fall and 27% in the non-cancer group had a fall. The final hierarchical linear model suggests fall risk in community dwelling elderly included: race, gender, ADLs, incontinence, depression, and pain. While cancer was not a statistical predictor of an increased rate of falls in this study, findings on the rate of falls in cancer patients are clinically significant and needs consideration.

Consequently, fall prevention interventions will become more important as the elderly cancer survivor population increases in size and the need to contain health care costs continues to rise. This study will be used to examine the consequences of falls to determine the increased rates of injuries as a consequence of falls when cancer and non cancer patients are compared.

FACTORS AFFECTING RECOVERY IN OLDER ADULTS AFTER CANCER SURGERY

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Patients with newly diagnosed cancers are frequently 65 years of age and older. Functional status, an important predictor of morbidity and mortality in older adults, is likely to be affected in some manner. We explored relationships among functional status, age, cancer site and stage, comorbidities, symptoms, psychological status, treatment, and demographic factors in older adults with cancer for which surgery was required. Data were combined from five randomized, clinical trials testing nursing interventions at 3 urban cancer centers. The sample consisted of 316 subjects, ages 65 and over, diagnosed with digestive, thorax, genitourinary, and gynecologic cancers. Functional status, defined as performance of current life roles, was measured by the Enforced Social Dependency Scale and SF-36 Health Survey (using the physical component summary measures). A multivariable analysis, using Generalized Estimating Equations, demonstrated that functional status improved over time ($p<0.001$). On average, subjects with cancers of the thorax ($p=0.027$) and annual income of \$40,000 or more ($p=0.001$) were associated with improved functional status. Treatment with combined chemotherapy and surgery ($p=0.014$), symptoms ($p<0.001$), and three or more comorbidities ($p<0.001$) were associated with decreased functional status. Controlling for cancer site and stage, comorbidities, symptoms, psychological status, treatment, and demographic variables, the relationship between age and functional status was not significant suggesting that factors other than age affect recovery of functional status in older adults following cancer surgery.

PAIN FOLLOWING CANCER: PREVALENCE, SEVERITY AND DISPARITIES IN CANCER SURVIVORS

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Disparities in cancer survival rates and pain rates exist for cancer patients; blacks die more often, and experience greater pain severity; however, little is known about pain in cancer survivors. Published rates vary widely. To date, studies focusing on disparities and the effect of chronic pain on quality of life (QOL) in survivors have not been done. Black and white survivors of breast, colorectal, lung and prostate cancer and multiple myeloma participated in this survey study. The surveys focused on current and past pain, physical and mental health, and QOL. Of the sample ($n=400$), blacks were more likely to have died before contacted (21% vs. 9%) and have bad addresses (10% vs. 5%). Of those reachable, agreement to participate was lower for blacks than whites (24% vs. 36%). Respondents were 65 ± 12 years old, 53% female, and 26% black, and breast (48%) or prostate (41%) cancer survivors. Seventeen percent currently experienced pain and 32% had pain since their cancer diagnosis. Rate of current pain did not differ by race, but was more common in women (30% vs. 3%, $p=.07$), as was pain since diagnosis (50% vs. 12%, $p=.03$). Although pain rates did not differ, blacks experienced greater pain severity (6.5 vs. 3.5, $p=.10$ at worst; 2.5 vs. 0.9, $p=.05$ at least; and 4.0 vs. 1.5, $p=.06$ right now; 0=no pain, 10=worst pain imaginable). Cancer pain in survivors is relatively common, highlighting the importance of assessment. Important disparities were found by race (severity) and by sex (prevalence) of pain in survivors.

RISK FACTORS FOR DELIRIUM IN A POPULATION OF ONCOLOGY PATIENTS

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Delirium is described as a disturbance of consciousness and a change in cognition that develop over a short period of time. Particularly in the case of patients diagnosed with and dying from cancer, the etiology of delirium involves the direct effect of a toxin exposure and/or withdrawal from medication and related substances. A number of risk factors affects this population of patients, and our research points to specific risk factors. These include pre-existing risk factors such as dementia, hearing and vision loss, and prior history of substance abuse. Additionally, pharmacological agents are one of the most frequent causes of acute confusion in our population of cancer patients. Together, these and other risk factors contributed to a significant number of our cancer patients experiencing delirium, with 62.9% of patients displaying delirium within the first 24 hours of admission and 91.5% of patients displaying delirium within the first 48 hours. Thus, identifying risk factors for delirium in populations of cancer patients helps to ease symptoms and prevent adverse events at the end of life.

SESSION 1160 (POSTER)

DISABILITY/MOBILITY

AUTONOMIC DYSFUNCTION AND IADL DISABILITY IN COMMUNITY-DWELLING OLDER WOMEN: THE WOMEN'S HEALTH AND AGING STUDY I

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Context: Disability in older adults is a major public health problem. Whether autonomic dysfunction contributes to instrumental activities of daily living (IADL) disability has not been studied. Objective: To test the hypothesis that autonomic dysfunction, as measured by abnormal heart rate variability (HRV), is independently associated with IADL disability in community-dwelling older women. Setting and Participants: Pilot study ($N=280$) within the Women's Health and Aging Study I, a population-based, prospective cohort study of 1002 women representative of the 1/3 most disabled community-dwelling older women in Baltimore (1992-1995). Design: Cross-sectional. HRV was measured by 6 traditional time and frequency domain measures. IADL disability was defined as difficulty managing money, taking medications, using a telephone, doing light housework, or shopping for personal items. Results: Autonomic dysfunction was associated with IADL difficulty. The odds ratio of IADL disability, comparing the lowest tertile of HRV (indicating worse HRV) to the top two tertiles, was 1.97 (95% CI: 1.15, 3.37) for the standard deviation of normal-to-normal intervals (SDNN) index, and 2.79 (95% CI: 1.61, 4.80) for very low frequency (VLF) power, after adjustment for demographic variables. Adjustment for disease variables attenuated this association for time domain measures (SDNN, $p=0.08$), although the association for VLF ($p<0.01$), a frequency domain measure, persisted. Conclusion: Autonomic dysfunction was associated with IADL disability, although associations were heterogeneous by HRV index. These findings raise the hypothesis that autonomic dysfunction may be a potentially modifiable risk factor for IADL disability.

THE EFFECT OF GRIP STRENGTH AND EDUCATION ON IADL DISABILITY OVER TIME ACROSS GENDER AMONG OLDER MEXICAN AMERICANS

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Objective: To examine the relationship between grip strength and instrumental activities of daily living (IADL) disability across gender among older Mexican Americans and secondarily to examine cognition as a potential moderator between grip strength and IADL. **Methods:** A 12-year cohort study of 1629 community dwelling men (48.7%) and women (51.3%) aged 65 and older from the Hispanic Established Population for the Epidemiological Study of the Elderly. Measures include socio-demographics, grip strength, cognition (MMSE), and comorbidities. IADL was measured with 7 items: telephone use, driving, shopping, meal preparation, light housework, taking medication, and handling money. General Estimation Equation was used to estimate IADL disability over time. **Results:** Mean age 71.6 ± 5.25 years, average highest grade completed was 5th, mean grip strength was $29.8 \text{ Kg} \pm 9.2$ for men and 19.8 ± 6.2 for women, mean MMSE 25.9. For men there was a significant protective effect of grip strength on becoming IADL disabled (OR=0.9945, CI 0.9901-0.9989). Higher education was associated with lower likelihood of becoming IADL disabled (OR=0.9891, CI 0.9789-0.9993). Similarly, significant protective effects of education (OR=0.9830, CI 0.9748-0.9913) and grip strength (OR=0.98, CI 0.9845-0.9955) was found for women, however depression was significantly associated with higher risk of becoming IADL disabled (OR=1.16, CI, 1.08-1.2). The relationship between grip strength and IADL was independent of cognition (MMSE). **Conclusion:** Grip strength and education have a protective effect on becoming IADL disabled for both men and women in older Mexican Americans. Depression increases the likelihood of becoming IADL disabled for women but not men.

SELF-REPORTS OF ACTIVITIES OF DAILY LIVING: THEIR CORRESPONDENCE WITH PERFORMANCE-BASED MEASURES

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Background: Many studies demonstrate relations between objective and subjective health measures where elderly individuals report chronic diseases and impairments and yet still estimate their health as good. Less is known about how objective performance based ADL-function might relate to widely-used self-reported ADL performance measures. **Aim:** The aim of this study is to analyze the relation between actual and reported ADL-function in a sample of people 80 and over. **Methods and sample:** Using a data set derived from the OCTO-Twin Study, the present investigation examined a sample of 291 individuals (192 women, 99 men) randomly selected from twin pairs. The mean age of the sample was 83 years. Interviews obtained performance-based measures related to ADL function (balance, flexibility, upper body strength), other objective measures of health (illnesses, medications) as well as three standard self-report measures (IADL, PADL, mobility). Measures of cognition, depression, age and gender were also obtained. **Results:** Using multiple regressions, we found that objective measures of performance and health had strong associations with the three subjective ratings of ADL. Other predictors (number of diseases and drugs, cognition, gender, age) differed for the three ADL measures. These results suggest that self-ratings of ADL are closely associated with performance of related functions, but are not consistently captured by other objective health measures. **Discussion and Conclusion:** Much of the research conducted with older people, as well as clinical assessment, relies on self-reports of ADL. The current findings indicate good cor-

respondence between these self-reports and performance-based assessments of related functions.

LATER LIFE EFFECTS OF POLIO: ONLY AGING OR SOMETHING ELSE?

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Researchers examining the cause of later life effects of polio have yet to agree on a specific cause. One possible cause is that most people affected by polio are now reaching older ages. Post Polio Syndrome, the clinical name for the later life effects of polio, affects up to 60% of polio survivors between ten to forty years after their initial infection and is characterized by new muscle weakness, pain, and fatigue. A recent paper focused on polio survivors experiencing PPS (Sorenson, Daube, & Windebank, 2006). The conclusion of this study was that the underlying cause of new weakness and health declines of polio survivors was 'normal' aging and not the result of previous damage or overuse. This project seeks to refute their conclusion and to determine the relationship between aging and the development of Post Polio Syndrome in later life. The log-linear regression analysis, on data from the 1994/1995 National Health Interview Survey on Disability's Polio Survivor subset, resulted in an inverted U-shaped as a curve, indicating that there was a complex relationship between age and PPS symptoms. The maximum likelihood of developing the later life effects of polio peaks between the ages of 45 to 55 and then declines in later life. Other factors that may have contributed to the findings were controlled for in additional models and results indicate that severity of polio symptoms in conjunction with age were the greatest predictors of PPS symptoms.

CHARACTERIZATION OF THE HEAD STABILIZATION RESPONSE TO A LATERAL PERTURBATION DURING WALKING IN OLDER ADULTS

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A main contributor of fractures in older adults is from a lateral fall. The decline in sensory systems results in difficulty maintaining balance stability. Head stabilization contributes to postural control by serving as a stable platform for the sensory systems. The purpose of this study was to characterize the head stabilization response to a lateral perturbation while walking. A total of 16 healthy older adults, aged 66-81 years, walked across a foam pathway 6 times. One piece of the foam pathway covered a movable platform that translated to the left when the subject stepped on the foam. Three trials were randomized in which the platform shifted. Angular rate sensors placed on the center of mass of the head and trunk collected head and trunk movement in all three planes of motion. The roll plane was analyzed to examine motion in the plane of the perturbation. Subjects stepped onto the platform with the right foot. Recovery step time and distance were recorded. The first trial was analyzed to capture the novelty of the perturbation. Results indicate a significant difference in footfall distance $t=0.004$, $p<0.05$, as well as the speed of foot recovery $t=0.001$, $p<0.05$, between natural and perturbed walking. Results indicate that the head $t=0.005$, $p<0.05$, and trunk $t=0.0001$, $p<0.05$, velocities increase during perturbed compared to natural walking. Older adults place their recovery foot down faster when perturbed to re-establish their base of support. Head and trunk segments are less stable and move with greater velocities to reestablish stability when perturbed.

FEAR OF FALLING APPEARING AFTER POST-ACUTE REHABILITATION IS ASSOCIATED WITH REDUCED FUNCTIONAL STATUS

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Objective: To investigate the association between fear of falling appearing within one month after discharge from post-acute rehabilitation and functional status in elderly patients. **Methods:** Participants (N=180, mean age 81.3±7.1 years, 75.6% women) were patients consecutively admitted to rehabilitation over a 6-month period. Demographics, functional, cognitive and affective status were assessed upon admission; functional status was assessed at discharge; history of falls since discharge, functional and affective status were assessed by phone one month after discharge. Fear of falling was assessed using the question: "Are you afraid of falling?". **Results:** Among patients without fear of falling at discharge (N=95), 20.0% (N=19) reported new fear of falling one month after discharge. Living alone (adjOR=4.9, 95%CI 1.04-23.16, P=.045), functional status at discharge (adjOR=0.5, 95%CI 0.32-0.88, P=.014), and depressive symptoms (adjOR=5.4, 95%CI 1.20-24.32, P=.028) independently predicted fear of falling at one month. There was weak evidence that history of falls since discharge (adjOR=4.1, 95%CI 0.81-21.31, P=.088) was associated with new fear of falling. Developing fear of falling was also associated with reduced functional status at one month (mean basic ADL score: fearful 5.2±0.8; confident: 5.8±0.4, P<.001). This association remained after controlling for demographics, functional status at discharge, depressive symptoms, and history of falls since discharge (coef=-0.4, 95%CI -0.73 to -0.16, P=.003). **Conclusion:** Fear of falling appearing within one month after discharge from post-acute rehabilitation was associated with reduced functional status in elderly patients. Further studies should determine whether early interventions targeting specifically fear of falling in these patients would improve their functional status.

SESSION 1165 (PAPER)

GERIATRIC CLINICAL ISSUES I

POST-SURGICAL COMPLICATIONS IN OLDER ADULTS: PREVALENCE AND ASSOCIATED FACTORS

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The purpose of this study was to examine patient and hospital factors associated with adverse events in older surgical patients during their hospitalizations. We used the California state inpatient data linked to the California hospital cost report, which included 82,898 surgical patients aged 65 or older who underwent 20 common major surgical procedures in 252 acute care hospitals in 2004. Four adverse events were measured using the Agency for Healthcare Research and Quality's Patient Safety Indicator (PSI) definitions with adjustment for presence on admission (POA). Generalized mixed models were used. After adjusting for POA, the adverse event rates per 1000 discharges were 1.9 for infections due to medical care, 4.7 for postoperative pulmonary embolism or deep vein thrombosis (DVT), 5.8 for decubitus ulcer, and 9.7 for postoperative respiratory failure. Patients with multiple chronic conditions and those who were admitted through the emergency department (ED) were more likely to experience 3 of the 4 adverse events. Patients admitted to for-profit hospitals were more likely to experience 2 of the 4 adverse events. There was no observed relationship between hospital nurse staffing and adverse events. Older surgical patients with greater chronic illness burden and those admitted through the ED are more likely to experience adverse events. Hospitals should develop and implement surgical safety interventions targeted to these patients.

FACTORS ASSOCIATED WITH IN-HOSPITAL DELIRIUM AFTER HIP FRACTURE

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Delirium is common after hip fracture, and is associated with poorer functional outcomes. We investigated factors associated with in-hospital delirium and subtypes of delirium in 124 hip fracture patients from 13 clinical sites recruited for the Cognitive Ancillary Study to the Transfusion Trigger Trial for Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS). Delirium at baseline (before third post-operative day) was assessed using Memorial Delirium Assessment Scale (MDAS) and Confusion Assessment Method (CAM). Predictors included education, gender, marital status, and pre-fracture dementia (assessed by diagnosis history and Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)). Overall, 69.4% were female, 34.7% currently married, and education averaged 12.3+/-3.25 years. Dementia prevalence was 22.2% from history, 30.4% from IQCODE, and 33.7% combined. Delirium was observed in 27.6% meeting CAM criteria. Among CAM-defined delirious subjects (n=35), most were hypoactive (68.6%) or a combination of hypoactive and hyperactive (20.0%), and only 4 (11.4%) were hyperactive alone. The average MDAS score was 6.59+/-5.66, with 8% having severe delirium symptoms (MDAS>17). Additionally, 28.3% had delirium symptoms (MDAS 5+) but not CAM-defined delirium. Delirium did not differ by gender (p=0.252), education (p=0.386), or marital status (p=0.99). Dementia patients were more likely to have delirium (37.1% vs. 19.4%, p<.001) and had higher MDAS scores. The occurrence of hyperactive delirium did not differ by any predictor. Findings confirm that delirium is common in hip fracture patients, especially among those with dementia. Our use of proxy IQCODE to detect dementia increased our ability to identify dementia cases.

HIP FRACTURE MANAGEMENT IN ELDERLY AFFECTED BY DEMENTIA

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Background. Hip fracture in the frail elderly is commonly associated with severe clinical outcomes, including loss of ability and death. Since cognitive impairment is not an exclusion criteria to surgery, here we compared the clinical course of patients with and without dementia, admitted to the Orthogeriatric section of the University Hospital San Gerardo during the period March 2007-December 2008. **Materials and Methods.** 89 patients with cognitive impairment (group A, mean age 84.8 yo) and 86 non-affected ones (group B, mean age 81.9 yo) were observed. We considered the following aspects: living status at admission, functional level, comorbidities, time to surgery, length of stay, pre- and postoperative delirium, rate of main complications, preoperative mortality. **Results.** Characteristics Group A Group B P-value Age [mean] 84.8 81.9 .01 MMSE [mean] 16.3 26.2 .001 Living status home 70(78.7) 80(93.0).001 nursing home 18(20.2) 6(7.0) .001 Total functional dependence 64(71.9) 4(4.7) .001 Comorbidities [mean value] 5.6 4.4 .001 Time to surgery [days] 2.8 2.7 ns Length of stay [days] 13.57 12.56 ns Pre-operative delirium N=-(%) 13(14.6) 2(2.3) .001 Postoperative delirium N=-(%) 42(47.2) 9(10.5).001 Complications N=-(%) 16(18.0) 8(9.3) .01 In-hospital mortality Preoperative N=-(%) 2(2.2) - .01 Post-operative N=-(%) 2(2.2) 1(1.2) .01 **Conclusions.** The clinical course of hip fractured patients with dementia, when managed in an Orthogeriatric section, is similar to the non-affected ones, except for mortality.

PREDICTIVE MODELING OF PRESSURE ULCER DEVELOPMENT IN ELDERLY HIP FRACTURE PATIENTS

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BACKGROUND: Pressure ulcers can cause pain, diminished quality of life, serious complications, and increased health care costs. Accurate identification of patients at high risk of pressure ulcers is necessary if preventive interventions are to be appropriately allocated. **AIM:** To develop a predictive model relating patient characteristics to pressure ulcer incidence following hip fracture, and to compare the model's performance to that of standard tools used in research and clinical practice (Braden and Norton scales). **METHODS:** The study was conducted in 2004-2007 in nine hospitals participating in the Baltimore Hip Studies network. Patients age ≥ 65 years who underwent surgery for hip fracture were examined at baseline and on alternating days thereafter to ascertain development of ≥ 1 pressure ulcers stage 2 or higher within 10 days of hospital admission (n=600). Information on pressure ulcer risk factors was obtained by examination, interview, and chart review. Logistic modeling was used to select a set of variables that maximized area under the receiver operating characteristics curve (AUC), a measure of predictive accuracy. **RESULTS:** The AUC of a model including six variables (exposure to friction or shear, nutritional status, mobility, fecal incontinence, hemoglobin level, and history of diabetes) was 0.70. AUCs for the Braden and Norton scales were both 0.65. **CONCLUSION:** A simple model based on six variables provided somewhat more accurate prediction of pressure ulcers than conventional scales. More work is needed to develop predictive models that are more accurate than standard tools.

A PRACTICAL APPROACH TO REDUCING PRESSURE ULCERS IN NURSING FACILITIES: NY STATE'S EXPERIENCE IMPLEMENTING ON-TIME QI

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New York State's overall nursing home pressure ulcer (PrU) prevalence rate ranks 32nd nationally despite high Medicaid reimbursement rates. In 2008, NY Department of Health partnered with AHRQ to implement On-Time, an evidenced-based approach to prevent PrUs, over a two-year period. 15 nursing homes were selected to participate, ranging from 120-518 beds. Participants had: - Baseline PrU prevalence $>10\%$. - Motivation in PrU prevention - Capacity for multi-disciplinary QI effort - Willingness to purchase On-Time compliant CNA HIT Front-line teams consolidated forms and standardized data elements, accessed reports to improve clinical decision-making, and redesigned workflow to integrate process improvements into daily work. Seven HIT vendors supported the effort by customizing software and producing clinical reports per On-Time specifications. Results to date have been promising. In previous On-Time implementation efforts in three states, CA, AZ, and NC, pressure ulcer prevalence rates dropped by 20 percent; high performing facilities saw a decrease of 33 percent (from 13.1 % to 8.7%). We will present the NY On-Time results to date and lessons learned. For example: - Increased engagement of front-line caregivers: CNAs meet with unit coordinators to review documentation completeness reports; dietitians meet with CNAs weekly to discuss residents' nutritional risk. - Improved multi-disciplinary team communication. - Flagged high-risk residents more accurately and quickly. - Reduced weight loss. - Reduced pressure ulcer incidence.

SESSION 1170 (SYMPOSIUM)

IMPROVING QUALITY OF CARE IN NURSING HOMES: USING HEALTH INFORMATION TECHNOLOGY TO IDENTIFY, ASSESS, AND MANAGE PAIN IN NURSING HOME RESIDENTS WITH DEMENTIA

Chair: L. Spokane, NYAHS, Albany, New York

Discussant: M. Ersek, University of Pennsylvania, Philadelphia, Pennsylvania

There is a growing national focus on using technology to improve healthcare. With funding from the NYS Department of Health, researchers from New York Association of Homes and Services for the Aging and the University of Pennsylvania developed research-based informatics and web-based educational tools to address the problem of undiagnosed and undertreated pain in nursing home (NH) residents with dementia. A consortium of 15 rural NHs, serving over 1,000 residents with dementia, is currently using these tools to improve pain assessment and management in these residents. The objective of this program is to describe how informatics reports used in conjunction with web-based education and assessment tools can help all levels of NH staff be more effective and efficient in identifying and treating pain in residents with dementia thereby improving the quality of life for this growing population. Individual papers during this session will: 1. Demonstrate how resident information already available in every NHs Minimum Data Set (MDS) data can be used to identify risk factors (i.e. chronic conditions and diseases) for pain and identify behavior/mood problems and other negative outcomes associated with pain in nursing home residents with dementia. Two logistic regression models will be discussed: a. Predictive Model for Pain b. Mood and Behavior Related to Pain 2. Present an overview of the Dementia Pain grant project and discuss how the models were incorporated into decision-support software. 3. Describe and discuss the innovative web-based education program and new pain assessment tool being piloted under the Dementia Pain grant.

A MODEL TO IDENTIFY PAIN IN NURSING HOME RESIDENTS WITH DEMENTIA

L. Spokane, C. Teigland, Z. Pulungan, NYAHS, Albany, New York

Assuming that factors causing pain are the same for all residents, we tracked cognitively intact residents who can readily report pain over four quarters from 2005-2006 (n=107,384) using Minimum Data Set (MDS) data for 670 NHs. Logistic regression analysis was used to develop a predictive model. The model was then applied to dementia residents to help nursing staff identify at risk cognitively impaired residents with likely undetected pain. Key risk factors include major diseases and conditions causing pain (e.g., arthritis (OR=1.82; 95% CI: 1.76-1.88), end-stage kidney disease (OR=1.72; CI: 1.46-2.02), stasis ulcers (OR=1.85; CI: 1.57-2.18) and special treatments and therapies (e.g., physical therapy OR=1.58; CI: 1.53-1.64). The model was incorporated into informatics software to easily identify residents with probable undetected pain and generate individualized risk profiles. Residents at high risk but not coded as having pain can be assessed using a validated pain assessment tool for the cognitively impaired.

A MODEL TO IDENTIFY MOOD/BEHAVIORS RELATED TO PAIN IN COGNITIVELY IMPAIRED NURSING HOME RESIDENTS

Z. Pulungan, C. Teigland, L. Spokane, NYAHS, Albany, New York

Using MDS data over four quarters from 2005 - 2006, we developed a logistic regression model to estimate the effect of pain on each of the mood and behaviors common in residents with dementia. Since pain is underreported in residents with dementia, we used the probability of having pain estimated from our first pain model as a measure of pain. Our results show that pain significantly affects all indicators of delirium, periodic disordered thinking/awareness and all indicators of depression, anxiety, and sad mood (e.g. periods of lethargy, insomnia, with-

drawal from activities, making negative statements). But not all behavioral symptoms are significantly affected by pain (e.g. wandering and socially inappropriate/disruptive behavior), meaning these behaviors are not good indicators of pain. By understanding which mood and behavior symptoms are good indicators of pain, nursing staff may be able to improve their ability to assess and manage pain in their cognitively impaired residents.

STOP PAIN IN NURSING HOMES (SPINH): IMPROVING PAIN ASSESSMENT AND MANAGEMENT IN RESIDENTS WITH DEMENTIA THROUGH WEB-BASED EDUCATION AND SUPPORT

M. Ersek, *School of Nursing, University of Pennsylvania, Philadelphia, Pennsylvania*

We will discuss the integration of web-based education and support to guide NH staff in using the informatics reports to screen for pain, and to assess and manage the pain identified in cognitively impaired residents. The Stop Pain in Nursing Homes (SPiNH) website is designed to educate various groups of caregivers, including licensed nursing staff, prescribers, and nursing assistants evidence-based strategies for assessing and treating pain, particularly in residents with cognitive impairment. This presentation will focus on the SPiNH pain assessment protocol and accompanying decision-support tools related to pain therapies. Also included is a discussion of the challenges encountered in translating "best practice" guidelines into consistent NH clinical care.

PROGRAM OVERVIEW: NYS DEPARTMENT OF HEALTH DEMENTIA PAIN GRANT

L. Spokane¹, C. Teigland¹, M. Ersek², Z. Pulungan¹, *1. NYAHS, Albany, New York, 2. University of Pennsylvania, Philadelphia, Pennsylvania*

We will present an overview of the goals and objectives of our project, "Pain Assessment and Management in Residents with Dementia Using Web-Based Education and Informatics in Rural Nursing Homes", and provide details on how the pain models were incorporated into easy-to-use decision-support software. Under this program, 15 rural nursing homes (NHs) in New York, serving over 1,000 dementia residents, are currently receiving 1) pain assessment tools and web-based education tailored to appropriate NH staff; 2) pain management guidelines and protocols; 3) support to promote diffusion of the information within the NH; and 4) resident-, unit-, and facility-level informatics reports to help staff identify cognitively impaired residents with high likelihood of undiagnosed pain. Examples of the research-based informatics reports will be shown and we will describe how NHs are using these reports to more accurately identify their dementia residents with probable unidentified pain.

SESSION 1175 (SYMPOSIUM)

MULTISYSTEM DYSREGULATION IN FRAILTY EMERGES IN RESPONSE TO DYNAMIC STRESSORS

Chair: *L.P. Fried, Mailman School of Public Health, Columbia University, New York, New York*

Discussant: *G. Kuchel, University of Connecticut, Farmington, Connecticut*

One conceptualization regarding frailty is that it is a medical syndrome presenting with an identifiable phenotype associated with dysregulated energetics, predicts mortality and disability, and, etiologically, results from dysfunction in multiple physiologic systems and, potentially, underlying biologic mechanisms. In theory, the vulnerability of frailty is a result of loss of complexity and effectiveness of physiologic responses, particularly manifested in the presence of stressors. To test this theory, we have conducted a series of nested substudies within the Women's Health and Aging Study II, in which women 85-95 years have undergone multiple low level physiologic stressors, each separated by weeks to months from the other. These include: 1. influenza vaccina-

tion; 2. glucose tolerance testing, resting metabolic rate and biomarker measurements pre and post; and 3. 31P MR-spectroscopy at rest and under conditions of isometric exercise of the leg, assessing association of frailty with impaired oxidative phosphorylation in muscle. We report here on associations of frailty status and related biomarkers with each of these objective measures, at rest and in response to the stressor. Findings provide the first evidence to support theory regarding the vulnerability of frail older adults to stressors, and the potential value of low level stress testing to unmask vulnerability.

FRAILTY IS ASSOCIATED WITH IMPAIRMENT IN VACCINE-INDUCED IMMUNE RESPONSE IN OLDER ADULTS

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The objective of this study was to test our hypothesis that frailty is associated with impaired antibody response to influenza immunization. To accomplish this, we administered standard trivalent inactivated vaccine (TIV) to 71 community-dwelling older adults (mean age 84.5 yrs, range 72-95). Serum samples were collected before and 4 weeks after vaccination. Antibody titers were measured using standard hemagglutination inhibition assay. The results showed that participants overall had higher post- than pre-vaccination antibody titers against influenza H1N1 and H3N2 (geometric means: 260+2.1 vs 174+2.1, $p=.001$ and 408+2.6 vs 279+2.2, $p=.01$, respectively). Among frail participants ($n=17$), however, these differences were much smaller and statistically non-significant (222+2.3 vs 174+2.5, $p=.43$ and 377+2.3 vs 261+2.0, $p=.17$, respectively). In addition, frail participants had significantly lower post-vaccination antibody titers to H1N1 strain than non-frail participants ($n=22$) (387+2.0 vs 222+2.3, respectively, $p=.03$). These findings suggest that frailty is associated with impaired antibody response to TIV.

GLUCOSE METABOLISM AND THE FRAILTY SYNDROME

R. Varadhan¹, C. Weiss¹, L.P. Fried², A.R. Cappola³, *1. Johns Hopkins Medical Institutions, Baltimore, Maryland, 2. Columbia University Mailman School of Public Health, New York, New York, 3. University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania*

The response to a glucose challenge is poorly characterized in old-old adults and may provide insight into the physiologic processes underlying the frailty syndrome. In a substudy of 73 women aged 85-96 years without a diagnosis of diabetes in the Women's Health and Aging Study II, we performed a standard 75-g glucose challenge and examined the stimulus-response dynamics of glucose levels at 0, 30, 60, 120 and 180 minutes and their association with frailty. Only 27% of the sample had normal fasting and response glucose levels by American Diabetic Association guidelines; 25% had levels consistent with diabetes and 48% had either impaired fasting glucose impaired glucose tolerance or both. 120-minute glucose level was strongly associated with frailty status (OR 3.94 per 1 SD increase, $p=0.01$), whereas fasting glucose was not ($p=0.29$). Our data demonstrate the importance of challenge testing to identify physiologic vulnerability and frailty status in old-old women.

CHARACTERIZATION OF RESTING METABOLIC IN FRAIL AND NON-FRAIL OLD-OLD WOMEN

C. Weiss¹, A.R. Cappola², K. Kim¹, L.P. Fried³, *1. Johns Hopkins Medical Institutions, Baltimore, Maryland, 2. University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, 3. Columbia Mailman School of Public Health, New York, New York*

A negative energy balance whereby expenditure is not matched by intake may explain the phenotype of frailty, unifying the previously-described associations with weakness, weight loss, inactivity and decreased food intake. What currently needs to be known is whether Resting Metabolic Rate (RMR), the largest component of energy expen-

diture, is decreased or increased in frailty. We hypothesize that RMR is higher on average in frail, compared to non-frail, older women after adjusting for body composition and confounders. In this study we characterize the association of frailty and RMR in 76 women aged 85-96 years in the Women's Health and Aging Study II. The association between frailty and RMR will provide a critical indication of whether RMR is downstream and follows muscle loss, if it is low, or an upstream factor that can cause cachexia-like wasting, if RMR is high. In addition, RMR level will be the basis of determining whether a negative energy balance

DYNAMICS OF PHOSPHOCREATINE RECOVERY IN THE SKELETAL MUSCLE OF FRAIL OLDER WOMEN

R. Varadhan¹, A. Horska¹, D. Russ³, C. Weiss¹, J.D. Walston¹, L.P. Fried², 1. *Geriatric Medicine, Johns Hopkins Center on Aging and Health, Baltimore, Maryland*, 2. *Columbia University, Mailman School of Public Health, New York, New York*, 3. *Ohio University School of Physical Therapy, Athens, Ohio*

Frail older adults, compared to non-frail, report more fatigue and are less active. Hydrolysis of phosphocreatine (PCr) in mitochondria provides an immediate source of small bursts of adenosine triphosphate (ATP), the main source of cellular energy. Depleted PCr is then replenished via oxidative phosphorylation (OP). OP is known to be impaired in aging. It is not known, however, whether alterations in OP explain the low-energy phenotype of frailty. We conducted a ³¹P magnetic resonance spectroscopy study at 1.5T to determine whether frailty is associated with impaired OP in muscle. Our analytic sample comprised 5 frail, 10 pre-frail, and 10 non-frail women (ages: 84–92, mean=87 years) from the Women's Health and Aging Study II. Across the three frailty status groups, we compared the dynamics of recovery of in-vivo concentrations of PCr in the tibialis anterior muscle after 30 seconds of maximal voluntary isometric dorsiflexion, adjusting for the force produced.

SESSION 1180 (SYMPOSIUM)

NURSES INVOLVEMENT IN NURSING HOME CULTURE CHANGE: OVERCOMING THE NURSING DILEMMA

Chair: *M. Mezey, College of Nursing, New York University, New York, New York*

Discussant: *D. Bakerjian, University of California San Francisco, San Francisco, California*

As nursing homes move from institutional to a more resident-directed care environment, the clinical care provided and directed by professional nurses remains critical and central to both the quality of care and quality of life of residents. Yet, these changes pose major challenges to traditional nursing practice in nursing homes, which could only be overcome with a serious examination of the real barriers. In response, The Hartford Institute for Geriatric Nursing, NYU College of Nursing, in collaboration with the Coalition of Geriatric Nursing Organizations and the Pioneer Network convened a panel of nursing and culture change experts for a day and a half to foster dialogue and surface facilitators for nurses' involvement in culture change. Since the goals and philosophy of culture change and nursing are highly compatible, this symposium will present the path toward adoption of culture change by nursing and other professionals, an examination of nursing and culture change practice domain compatibility, and a review of culture change research with recommendations for future research.

OVERCOMING THE NURSING DILEMMA

S.G. Burger, *Hartford Institute for Geriatric Nursing, New York University College of Nursing, Washington, District of Columbia*

As nursing homes move from an institutional to a more resident-directed care environment, the clinical care provided and directed by professional nurses remains critical and central to both quality of care and quality of life. The goals and philosophy of culture change and the goals of nursing are highly compatible. Nevertheless, culture change

poses a number of dilemmas for nurses, including challenges to nurses' traditional notions of accountability for the clinical care of residents and issues of whether nurses are practicing within their scope of practice with regard to delegation of nursing acts and violating professional and regulatory requirements. This presentation will discuss these and other issues and address the need for nurses' participatory role in developing a vision for nurses' role in the evolving culture change initiative.

CULTURE CHANGE DISSEMINATION: PATHWAYS AND CHALLENGES

B. Kantor, *Pioneer Network, Rochester, New York*

As it enters its second decade, the culture change movement is at a crossroads: although the true "pioneers" are on board, widespread implementation of resident-directed practice has not occurred. We are now ready to move from the demonstration stage to the broad-scale spread of this compelling innovation. Since Nursing is at the core of resident-directed care, nurses are key partners in this phase of the movement. While we know it's possible to deliver person-directed care that's both cost-effective and highly satisfying, the lack of clearly defined steps and pathways in culture change is a barrier to the broader spread of innovation. This presentation focuses on Pioneer Network's national initiatives and partnerships intended to speed diffusion of this innovation to nursing and other professions. Emphasis will be on data-driven efforts that accelerate adoption and support implementation and sustainability by articulating the operational linkages between person-directed care, quality of care, and financing.

STRUCTURES, PROCESS AND VALUES OF NURSING AND THE TENETS OF CULTURE CHANGE

C. Beck, *University of Arkansas for Medical Sciences, Little Rock, Arkansas*

Although, resident centered care is a key value underlying all models of nursing practice, nurses have sometimes been viewed as resistant to culture change. This presentation will review the five domains of the Artifacts of Culture Change instrument (Bowman and Schoeneman, 2006) – care practices, the environment, family and community, leadership, and workplace practices. These domains will then be used to analyze points of synergy between the structures, process and values of nursing and the tenets of culture change, as well as potential causes of nurses' perceived resistance to culture change. Strategies for supporting these points of synergy and decreasing perceived resistance will be discussed.

RESEARCH RECOMMENDATIONS FOR NURSING HOME CULTURE CHANGE

C. Mueller, *University of Minnesota, School of Nursing, Minneapolis, Minnesota*

The findings of a systematic review of the literature on nursing home culture change (NHCC) research will address how far NHCC has penetrated current US nursing homes, valid and reliable measures of NHCC, evidence of the impact of NHCC on resident, staff and organizational outcomes, and the extent of research on nursing/nurses and NHCC. The review focuses on studies that evaluated the implementation of NHCC models. Rigorous study of NHCC is in its infancy and the majority of research to date is descriptive, yet points to desired staff, resident, and organizational outcomes in nursing homes. There remain significant questions about the role and responsibilities of licensed nurses in organizations that are integrating the NHCC philosophy and associated care practices. Recommendations for future research will be proposed.

OBESITY IN OLD AGE: DEFINITION AND CONSEQUENCES OF OBESITY SUBTYPES

Chair: A. Koster, *National Institute on Aging, Bethesda, Maryland*
 Discussant: M. Visser, *Institute of Health Sciences, VU University, Amsterdam, Netherlands*

Obesity is increasingly prevalent in older people and is associated with disability and poor health. This symposium will explore the existence of subtypes of obesity in old age and how these subtypes might affect the association of obesity with health outcomes. One subtype might depend on the duration of obesity over the lifetime. Snijder and colleagues present the role of weight history on functional limitations and strength in old age using data from the Longitudinal Aging Study Amsterdam (LASA). Another subtype may relate to body fat distribution which might be more important than weight, in particular increased abdominal fat. Al Snih and colleagues examined the effect of body mass index and waist circumference on 14 year all-cause, cardiovascular mortality, and cancer mortality among older Mexican Americans participating in the Hispanic Established Population for the Epidemiological Study for the Elderly. Feasible cut-offs of waist circumference in older adults are explored by Heim and colleagues in LASA. Finally the "healthy obesity" hypothesis is tested by examining subtypes of obesity based on the presence of metabolic alterations using data from the Health, Aging, and Body Composition Study. Koster and colleagues examine body composition differences among obese older persons with and without metabolic alterations. Stenholm and colleagues, lastly, evaluate the risk of mobility limitations among obese and non-obese persons with and without metabolic alterations.

THE ROLE OF WEIGHT HISTORY IN PERFORMANCE, FUNCTIONAL LIMITATIONS AND STRENGTH

M.B. Snijder¹, N. Heim¹, D.J. Deeg², J. Seidell¹, M. Visser^{1,2}, *1. Dept of Health Sciences, VU University Amsterdam, Amsterdam, Netherlands, 2. EMGO-institute, VU University Medical Center, Amsterdam, Netherlands*

Our aim was to investigate the role of weight history in performance, functional limitations and strength at late middle-age. Current BMI, weight history, performance-score (1-12), function-score (7-35) and grip-strength (kgf) were determined at baseline (n=860) and after 3 years (n=770) in 59.9±2.9 y old participants of the Longitudinal Aging Study Amsterdam. Four overweight-patterns were found: never(reference), current, since age 40, and since age 25. Performance did not differ between groups. Functional limitations and strength increased significantly across the four overweight-patterns. For example, age- and sex-adjusted ORs (95%CI) for experiencing any difficulty on seven daily activities were 1.5(1.0-2.2), 2.5(1.6-3.8) and 2.6(1.6-4.0), respectively. Adjustment for smoking, education and physical activity did not materially change the results. Prospectively, there was a tendency of greater reduction in strength and more functional limitations with longer overweight history. Already at late middle-age, longer overweight history is associated with more and increasing functional limitations and greater reductions in strength.

BMI AND WC AS PREDICTORS OF 14-YEAR ALL-CAUSE, CARDIOVASCULAR, AND CANCER MORTALITY AMONG OLDER MEXICAN AMERICANS

S. Al Snih, K. Markides, K. Ottenbacher, J. Goodwin, *Division of Rehabilitation Sciences/Sealy Center on Aging, University of Texas Medical Branch, Galveston, Texas*

Objective: To examine the effect of body mass index (BMI) and waist circumference (WC) on all-cause, cardiovascular (CV), and cancer mortality among older Mexican Americans. Methods: A 14-year prospective cohort study of 2575 non-institutionalized aged 65 and older. Measures included socio-demographic, smoking, medical conditions, BMI,

and WC. Results: At baseline, the mean BMI (Kg/m²) for men and women was 27.1 and 28.4, respectively, and the mean WC (cm) was 101.7 and 99.4, respectively. When BMI and WC were examined simultaneously, high BMI was associated with lower risk of all-cause mortality in women, and WC was associated with high risk of all-cause mortality in men and women. High WC was associated with high risk of CV mortality only in women. High BMI and high WC were not associated with all-cancer mortality in either men or women. Conclusion: Obesity measured by WC is more predictive of mortality, especially among women, in older Mexican Americans than is obesity measured by the BMI.

FOUR HEALTH OUTCOMES RELATED TO LARGE WAIST CIRCUMFERENCE: CUT-OFFS SHOULD BE HIGHER IN OLDER ADULTS

N. Heim¹, M.B. Snijder¹, D.J. Deeg², J. Seidell¹, M. Visser^{1,2}, *1. Dept of Health Sciences, VU University Amsterdam, Amsterdam, Netherlands, 2. EMGO-Institute, VU University Medical Center, Amsterdam, Netherlands*

Our aim was to explore applicable cut-offs of waist circumference (WC) in older adults. Data of 1789 participants aged ≥70 were collected at five subsequent triennial measurement cycles of the Longitudinal Aging Study Amsterdam (4996 observations). Cross-sectional associations of WC with pain, mobility limitations, osteoarthritis and diabetes were studied using GEE models fitted in restricted cubic spline functions. Model fits for applying different cut-offs to categorize WC in the association with all outcomes were assessed using the Quasi-likelihood Independence Criterion (QIC). Visual inspection of the spline regression curves suggested higher cut-offs of WC. Particularly in women, QIC confirmed a better model fit when using higher WC cut-offs. For example, applying a 98cm cut-off (instead of the current 88cm) for pain, the QIC improved considerably from 8418 to 8333. This study confirms that higher cut-offs for high-risk WC should be applied in older adults.

BODY COMPOSITION DIFFERENCES AMONG OBESE OLDER PERSONS WITH AND WITHOUT METABOLIC SYNDROME

A. Koster¹, S. Stenholm², D. Alley³, M. Visser⁴, E. Simonsick², B. Nicklas⁵, A. Kanaya⁶, T. Harris¹, *1. Laboratory of Epidemiology, Demography, and Biometry, National Institute on Aging, National Institute on Aging, Bethesda, Maryland, 2. Longitudinal Studies Section, Clinical Research Branch, National Institute on Aging, Baltimore, Maryland, 3. Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine, Baltimore, Maryland, 4. Institute of Health Sciences, Faculty of Earth and Life Sciences, Vrije Universiteit, Amsterdam, Netherlands, 5. Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina, 6. Division of General Internal Medicine, University of California, San Francisco, California*

This study examined body composition differences in obese older persons with and without metabolic syndrome (MS). Data were from 729 obese men and women (BMI≥30 kg/m²), aged 70-79 participating in Health ABC. Among obese men and women, individuals with MS had significantly more abdominal visceral fat and less thigh subcutaneous fat than those without MS (p<0.01) adjusted for demographics and lifestyle factors. In obese men and women, the likelihood of MS increased by 33% in men (OR:1.33, 95%CI:1.02-1.73) and over 2-fold in women (OR:2.17, 95%CI:1.68-2.80) per standard deviation (SD) increase in visceral fat. In contrast, likelihood of MS decreased in both men (OR:0.75, 95%CI:0.59-0.95) and women (OR:0.73, 95%CI:0.59-0.89) with each SD increase in thigh subcutaneous fat. Even though total fat mass was similar in obese persons with and without metabolic alterations, fat distribution varied significantly, in particular increased visceral fat and decreased thigh subcutaneous fat were related to MS.

OBESEITY STATUS AND METABOLIC ALTERATIONS AS PREDICTORS OF INCIDENT MOBILITY LIMITATION IN WELL-FUNCTIONING OLDER PERSONS

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This study aims to examine the “healthy obesity” hypothesis by estimating the risk of new mobility limitation among obese and non-obese older persons with and without metabolic syndrome (MS). Data are from 2993 well-functioning men and women aged 70–79 participating in the Health ABC study. Obesity was defined as BMI ≥ 30 kg/m² and MS as meeting ≥ 3 of the ATP III criteria. Mobility limitation was defined as any difficulty walking 1/4 mile or climbing 10 steps during two consecutive semiannual assessments over 6.5 years. 55% developed mobility limitation. Compared to non-obese/no MS group, the adjusted risk of incident mobility limitation was increased in the groups of non-obese/MS (HR 1.32; 95% CI 1.16–1.50), obese/no MS (HR 1.62; 95% CI 1.38–1.90) and obese/MS (HR 1.74; 95% CI 1.52–2.00). In conclusion, additional evaluation of MS may help to distinguish obese persons at higher risk of mobility limitation. This research was supported by the Intramural Research Program of the NIH, National Institute on Aging (NIA) and NIA contracts N01-AG-6-2101, N01-AG-6-2103 and N01-AG-6-2106.

SESSION 1190 (SYMPOSIUM)

PHYSICAL ACTIVITY AND DIABETES IN US OLDER ADULTS: PUBLIC HEALTH PERSPECTIVES

Chair: *N. de Rekeneire, Section of Geriatrics, Yale University School of Medicine, New Haven, Connecticut*

Discussant: *C.J. Caspersen, Centers for Disease Control and Prevention, Atlanta, Georgia*

Older adults are at higher risk of developing chronic diseases, especially diabetes. Observational and randomized controlled studies reveal that physical activity and/or exercise have a strong role in preventing and treating diabetes. This is important, because in 2007, almost 25% of non-institutionalized U.S. adults aged 60 years and older had diagnosed and undiagnosed diabetes. We use national data to describe physical activity levels among older U.S. adults with and without diabetes. The 2008 Physical Activity Guidelines (PAG) for Americans offer evidence for the many health benefits of physical activity, and the amount of physical activity needed to provide such benefits. Prevalence estimates from the 2007 Behavioral Risk Factor Surveillance Survey (BRFSS) show that only 51.45% of adults aged 65+ reported meeting minimum PAG standards. Among those with diabetes, 47.3% met the 2008 PAG, while 28.9% met 2007 American Diabetes Association recommendations. Using the 1997-2004 National Health Interview Survey (NHIS), we note that the prevalence of sedentary lifestyle among older adults is higher among those with- than without diabetes, with only modest temporal trends. Also, regional proportions from the 2000-2006 NHIS for inactive adults aged 50+ with diabetes provide estimates of frail, impaired and those having comorbidities, that when applied to 2000-2006 BRFSS data, project the need for state-based physical activity programs for these specific groups. Overall, sedentariness remains relatively high with little progress towards improving physical activity levels among older adult Americans. Physical activity programs are needed to decrease sedentariness in this population.

PHYSICAL ACTIVITY GUIDELINES FOR OLDER AMERICANS

J. Kruger, F. Loustalot, *PAHB, CDC, Atlanta, Georgia*

Participation in physical activity can reduce the risk of cardiorespiratory and metabolic disease, colon and breast cancer, and improve musculoskeletal and cognitive functioning among older adults. The 2008 Physical Activity Guidelines for Americans (2008 PAG), provides the most recent evidence-based guidelines for physical activity. This presentation will discuss the 2008 PAG, and provide prevalence estimates for those meeting minimum aerobic physical activity standards (≥ 150 min/week of moderate-intensity; 75 min of vigorous-intensity; or an equivalent combination). Data were obtained from the 2007 Behavioral Risk Factor Surveillance System, and SUDAAN was used for data analysis. In 2007, 110,891 respondents aged 65+ completed moderate- and vigorous-intensity physical activity questions, and 51.45% (95% confidence interval 50.9%-52.0%) reported meeting minimum aerobic 2008 PAG. Nearly half of older adults do not meet 2008 PAG minimum physical activity standards. Dissemination of the 2008 PAG among older adults would aid in implementation of evidenced-based public health interventions.

ARE U.S. OLDER ADULTS WITH DIAGNOSED DIABETES MEETING PHYSICAL ACTIVITY RECOMMENDATIONS?

G. Zhao, E.S. Ford, C. Li, L.S. Balluz, *Division of Adult and Community Health, Centers for Disease Control and Prevention, Atlanta, Georgia*

Physical activity is therapeutically important in diabetes control (i.e., promoting weight loss, improving glycemic control and insulin sensitivity, and reducing risk of diabetes complications). Currently several physical activity recommendations have been made both for people with diabetes (Standards of Medical Care in Diabetes-2007) and for the general public (Healthy People 2010 objectives; 2008 Physical Activity Guidelines for Americans). Using a large, nationally representative sample from the 2007 Behavioral Risk Factor Surveillance System, we estimated the prevalence and the likelihood of meeting physical activity recommendations among adults aged ≥ 65 years with diabetes ($n=18,370$) in comparison to those without diabetes ($n=80,802$) after multivariate adjustment. Our results showed that older adults with diabetes were significantly less likely to engage in physical activity at recommended levels compared to those without. Further research on the barriers for participating in regular physical activity and intervention efforts to promote physical activity are needed among older adults with diabetes.

CHANGE IN RATE OF SEDENTARY LIFESTYLE AMONG US OLDER ADULTS WITH AND WITHOUT DIABETES: 1997 - 2004

Y.J. Cheng¹, N. de Rekeneire², C. Caspersen¹, 1. *Centers for Disease Control and Prevention, Atlanta, Georgia*, 2. *Yale University School of Medicine, New Haven, Connecticut*

Decreasing sedentary lifestyle is an important public health goal for older U.S. adults with and without diabetes. Using 1997-2004 National Health Interview Survey data, we examined trends in sedentary prevalence (defined as performing no leisure-time physical activity during the last year). Among 48,811 participants aged 65 years or older (roughly 6,100/year), after adjustment for age, sex, and race/ethnicity, sedentary prevalence in 1997 (53.3%) was similar to that in 2004 (52.2%; $p=0.305$). However, among persons with diabetes sedentary prevalence decreased from 65.6% in 1997 to 60.5% in 2004 ($p=0.043$). Despite this decrease in 2004, people with diabetes still had a 10.1% higher sedentary prevalence than those without diabetes ($p<0.001$). Adjustment for self-reported fair/poor health status, however, eradicated differences in sedentary prevalence between persons with and without diabetes (all- $p>0.050$). Increased public health efforts are needed to reduce sedentary lifestyle among older adults, especially for persons with diabetes having poor health status.

PROJECTING THE NEED FOR STATE-BASED PHYSICAL ACTIVITY PROGRAMS FOR OLDER ADULTS WITH DIABETES

K. Kirtland^{1,2}, C. Caspersen², M. Zack³, 1. Northrop Grumman, Atlanta, Georgia, 2. Division of Diabetes Translation, Centers for Disease Control and Prevention, Atlanta, Georgia, 3. Division of Adult and Community Health, Centers for Disease Control and Prevention, Atlanta, Georgia

Physical activity helps diabetic older adults with physical impairments or comorbidities control their diabetes. Using 2000-2006 NHIS and BRFSS, we calculated synthetic state level estimates of the prevalence among inactive adults aged 50+ years with diabetes of being: Homebound, Frail (having difficulty to all of: walking a quarter of a mile, climbing ten steps, standing for two hours, stooping, bending, and kneeling); Impaired (some but not all of the above impairments); Comorbid conditions (arthritis, hypertension, cancer, visual problems, stroke, respiratory illness, cardiovascular diseases); or Healthy (no impairments or comorbidities). The estimated state-specific prevalences ranged from 2.2-2.8% (n=315-29,186) for Homebound, 6.1-9.2% (n=878-81,324) for Frail, 20.0%-26.3% (2,974-275,516) for Impaired, 36.0%-43.6% (n=5,390-499,360) for Comorbid conditions, and 4.0%-6.9% (n=923-85,528) for Healthy. State program planners can use their state's estimates to identify and deliver specific kinds of physical activity programs needed to enhance diabetes control among older adults with distinct functional limitations.

SESSION 1195 (SYMPOSIUM)

ADMINISTRATION ON AGING'S NURSING HOME DIVERSION INITIATIVE: EXPERIENCES FROM FOUR STATES

Chair: L. Alexih, The Lewin Group, Falls Church, Virginia

Discussant: J. Lugo, Administration on Aging, Washington, District of Columbia

The Administration on Aging's (AoA) Nursing Home Diversion (NHD) program enables states to use existing Older Americans Act (OAA) and state revenue funds in a more flexible manner to provide a greater range of support options for people with disabilities. The program gives consumers a greater role in determining the types of services and the manner in which they receive them. The competitive grant-funded program targets and assists individuals at risk of nursing home placement and spend-down to Medicaid. The intended outcome is to promote community living through the receipt of consumer directed home and community based services. The NHD program is administered through State Units on Aging, in partnership with Area Agencies on Aging and in collaboration with community aging service providers. The program encourages the Aging Services Network to modernize and transform the funding they receive under the OAA and other non-Medicaid sources, into flexible, consumer-directed service dollars. The program is designed to complement the CMS Money Follows the Person Rebalancing Demonstration. The inclusion of several state representatives on the panel will allow for a diverse discussion on how the aging services network is managing the diversion process including: identifying and assessing at-risk consumers, leveraging existing resources, and ensuring that the needs and preferences of consumers and their family caregivers are fully considered. This session will provide an opportunity to share early implementation experiences, methods of integrating transition with the existing service delivery system for older adults, challenges encountered, and evaluation strategies and early outcomes.

MASSACHUSETTS ADRCS: COMMUNITY FOCAL POINTS FOR NURSING HOME DIVERSION AND CONSUMER DIRECTION

H. Johnson, MA Executive Office of Elder Affairs, Lunenburg, Massachusetts

Massachusetts has moved steadily over the past several years to make community long-term care services and supports available, affordable, and accessible alternatives to institutional care. The State is building its nursing home diversion and Veteran's HCBS activities within the existing infrastructure of its 11 decentralized, "no wrong door" ADRCs statewide. Coupled with a desire to anchor ADRCs as community access points for long term services and supports, it is promoting options counseling as a core function within the ADRCs to educate consumers about all of their choices. In support of consumer choice, MA is also incorporating consumer direction service options within its home and community-based programs. Findings from the options counseling pilot project will be discussed, as well as recommended strategies for embedding consumer direction within existing programs and services.

INTEGRATING CASH AND COUNSELING INTO A CAREGIVER RESPITE PROGRAM: EARLY OUTCOMES

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Connecticut is implementing its cash & counseling program, Choices at Home (CAH), through two caregiver respite programs. Caregivers and care recipients may hire and pay an individual of their choice to provide care through CAH, or remain in the "traditional services" (TS) group. Individuals from the CAH and TS groups are interviewed at commencement of services, at 3 months, and at program discharge. Early data comparing CAH with TS recipients at 3 months shows no statistically significant differences between the groups. Both groups express high levels of satisfaction with services and paid caregivers, and similar levels of depression, caregiver burden, unmet need. The majority of the CAH group report a high likelihood that the care recipients would have entered a nursing home without these services. Even in its infancy, CAH appears to be a beneficial addition to the caregiver respite programs for people desiring to direct their own services.

BRIDGING THE VETERANS HEALTH ADMINISTRATION AND AGING SERVICE SYSTEMS IN NEW YORK STATE: NY

P. McCallion¹, L. Ferretti¹, G. Koser², 1. University at Albany, Albany, New York, 2. New York state Office for the Aging, Albany, New York

As part of its self-directed nursing home diversion modernization project New York is one of ten states selected to plan for the inclusion of veterans through veteran directed home and community based services. In this presentation, a process will be described from an aging services perspective of: (1) Identifying critical similarities and differences in services and service approaches; (2) Developing joint targeting, recruitment and care planning activities; (3) Training staff in both systems; (4) Ensuring compatibility between procedures and protocols; (5) Adding value to both service systems and most importantly to the veteran participants. Lessons learned and challenges confronted will be highlighted and next steps discussed.

NURSING HOME DIVERSION IN GEORGIA

K. Grier¹, C. Pellino², 1. GA Division of Aging Services, Atlanta, Georgia, 2. Atlanta Regional Commission, Atlanta, Georgia

Georgia's nursing home diversion program, Support Options, provides consumers with choices in the services they receive in order to remain at home. Through active participation, consumers enrolled in the program decide the combination of services and goods that will best meet their needs at home. Support Options is a departure from the traditional case management model, and embraces the concept and practice of self-directed care. This session will discuss the components of a

self-directed model of care, and elements that are necessary for true self-direction. This session will also discuss the assessment tool used in Support Options, the Determination of Need – Revised (DON-R), which is a standardized and automated screening tool to identify those persons who are at greatest risk for nursing home placement and in greatest need for support. This discussion will also include a description of the Aging Information Management System (AIMS), Georgia's data collection tool.

SESSION 1200 (POSTER)

ADULT PROTECTION AND ELDER ABUSE - SRPP POSTER SESSION

SILVER ALERTS: STATES' RESPONSE TO MISSING VULNERABLE ADULTS

A. Fernandes, K. Colello, *Congressional Research Service, Washington, District of Columbia*

A patchwork of alert systems to recover missing vulnerable adults is developing in several states. These systems, administered at the state and local levels, are intended to alert law enforcement and the public that adults with mental or physical disabilities are missing and may need assistance returning home. Recent media attention to cases of vulnerable missing adults, particularly missing seniors with Alzheimer's disease, has prompted policymakers to consider whether the federal government should expand its role in helping these individuals. Legislation was passed in the U.S. House of Representatives on February 11, 2009 that would establish a grants program to encourage states to develop, expand, and coordinate these alert systems. The proposed program is similar to a federal grants program that funds training and technical assistance for what are known as AMBER (America's Missing: Broadcast Emergency Response) Alert systems. In response to the increased congressional focus on alert systems for missing adults, the Congressional Research Service (CRS) gathered data in 11 states that were known to have developed such systems. This presentation will provide an overview of the alert systems in these 11 states, including detailed findings related to: legal authority; system implementation and administration; the target population; use of the alert system; and, information about outcomes. The presentation will also discuss issues for policymakers to consider with respect to the federal role, if any, in developing state alert programs for missing adults.

A COMPARISON OF THE DYNAMICS, RISK FACTORS, CONSEQUENCES AND OUTCOMES OF FOUR TYPES OF ELDER MISTREATMENT

S.L. Jackson, T.L. Hafemeister, *Psychiatry, University of Virginia, Charlottesville, Virginia*

Financial exploitation of the elderly is expected to proliferate over the next decade as the elderly population continues to grow rapidly, its relative wealth increases, and its social isolation becomes more pronounced. However, it has been suggested that financial exploitation often co-occurs with other forms of mistreatment such as physical abuse or neglect. This study examined four types of elder mistreatment: financial exploitation co-occurring with either physical abuse or neglect (i.e., hybrid cases), financial exploitation only, neglect only, and physical abuse only. Using semi-structured, in-depth interviews, 76 pairs of victims of elder abuse and assigned caseworkers from Adult Protective Services (APS) in Virginia were interviewed separately about the nature, causes, and consequences of the type of abuse the elder experienced. This presentation will describe the dynamics of these four forms of elder abuse (particularly co-occurring financial exploitation in comparison to the other three forms of elder mistreatment), the nature of this abuse (e.g., multiple cases involved the misuse of a power of attorney), differences in the risk factors involved, the consequences of the abuse (e.g.,

the amount of money lost and recovered as well as other losses), and case outcomes. Implications for policy and practice will be discussed.

A PROTOCOL TO ASSESS ELDER ABUSE AND NEGLECT

T. Peak, F. Ascione, *Social Work Program, Utah State University, Logan, Utah*

We present the two instruments we developed to screen for elder abuse in the context of animal welfare issues. With funding from the Kenneth A. Scott Charitable Trust and in collaboration with the Utah Division of Aging and Adult Services, we developed both a general protocol that assesses animal welfare issues in the lives of elder adults and a follow-up protocol that can be used in cases where elder adults have expressed concern about the welfare of their animals (including threatened and actual harm). Preliminary drafts of the protocols were reviewed and field tested by Utah Adult Protective Services personnel and then reviewed by experts in the field of gerontology. Extensive revisions resulted from these collaborative efforts, including shortening the original three part assessment protocol into one instrument that first explores the topic and that would identify the need for a more thorough follow-up for those cases that did describe a threat of harm to a pet. In addition, the assessment protocols are supplemented by a PowerPoint training presentation for professionals working in aging and adult services, adult protective services, and animal welfare agencies, that is posted on the Utah Division of Aging and Adult Services Website, the Utah State University Department of Psychology, and the Social Work Program websites. Our hope is that all these materials will enhance the welfare of animals and the elder adults with whom they live. Both the general and the follow-up protocols as well as parts of the powerpoint materials are presented and discussed.

COMPARATIVE STUDY OF ELDER ABUSE AMONG INDIVIDUALS WITH MENTAL, DEVELOPMENTAL, OR PHYSICAL DISABILITIES IN JAPAN FROM THE PERSPECTIVE OF THEIR FAMILY MEMBERS

K. Masuda, *Seigakuin University, Saitama, Japan*

The present study aims to 1)compare the extent of elder abuse among individuals with mental, developmental, or physical disabilities from the perspective of their family members, 2)analyze the factors affecting abuse among individuals with mental, developmental, or physical disabilities, and 3)assess the relationship between the type of disability and the type of abuse. In 2007, a mail survey was conducted on 3,495 family members of individuals with mental(n=1,4 3,495 family members of individuals with mental(n=1,495)and developmental(n=2,000)disabilities. Subsequently, in 2008, a mail survey was conducted on 4,300family members of individuals with cerebral palsy(n=1,000) and spinal cord injury(n=3,300). Valid responses were recieved from 503 family members of individuals with mental disabilities(valid response rate=33.6%),888family members of individuals with developmental disabilities(valid response rate=44.4%), 576 family members of individuals with cerebral palsy (valid response rate=57.6%), and 891 family members of individuals with spinal cord injury(valid response rate=27.0%). The results demonstrated the following:1)according to family members, the extent of abuse among individuals with developmental disabilities was severe,2)the abuse of individuals with mental disabilities occurred most often in the workplace, while the abuse of individuals with spinal cord injury occurred most often in the workplace,3) individuals with developmental disabilities were most often the victims of physical abuse. These and several other findings will be discussed in this session.

EXPLORING ORGANIZATIONAL FACTORS ASSOCIATED WITH REPORTING OF ELDER MALTREATMENT INCIDENTS TO THE ADULT PROTECTIVE SERVICE (APS) SYSTEM

S. Balaswamy, N.L. Fields, *College Of Social Work, The Ohio State University, Columbus, Ohio*

There is agreement in the APS field that only a small fraction of the incidence of elder maltreatment cases is reported. Studies have frequently cited lack of public awareness, knowledge of how to recognize signs and report, and absence of collaborative efforts between community agencies and APS as reasons for underreporting, but organizational deficits that may prevent reporting has not been studied. This study focuses on indicators related to organizational infra-structure that are likely to contribute to under-reporting of APS cases in Ohio. Data was collected from 88 APS staff through telephone interviews. In addition to interviews, census data and state agency data on reported incidents for each county were analyzed. A three-year review of incident reports from counties indicates a disproportionate variability in the number of APS referrals received by county. Some counties report no incidents of elder maltreatment, while others reported relatively few cases. Larger counties tend to consistently report receiving higher numbers of incidents. Further, the results suggest that having full-time APS staff positions, higher number of staff, APS staff handling only APS cases, having a well-publicized APS number, having access to APS staff after hours and existence of 24-hour abuse hotline significantly improves the number of maltreatment cases reported to the APS system. Consistency on reported incidences across three years by counties was observed. There is greater dependency on local law enforcement in absence of a formal access system for reporting. The importance of having a well-coordinated infra-structure for increasing reporting and policy implications are discussed.

ASSESSING CAPACITY: AN EXAMINATION OF THE PROCESS

H.L. Connors, *Sociology, College of the Holy Cross, Worcester, Massachusetts*

This study examines protective service case managers', elder law attorneys' and geriatricians' experience in assessing elders' decision-making capacity in Massachusetts. In-person, qualitative interviews with a total of twenty-four professionals working with elders in Massachusetts were analyzed to understand the tools professionals use to assess whether a person has capacity to make a specific decision. Respondents reported using a variety of techniques to determine their clients' decisional capacity, including formal assessment tools, informal assessments, and seeking other opinions. Physicians were more likely than protective service or lawyer respondents to report the use of cognitive exams to evaluate patients. Attorneys and protective service case managers reported that although they do not have the training required to formally administer neuropsychological evaluations, they will sometimes use variations of such tests to indicate the need to consult with other professionals. These respondents were more likely to use informal tools such as talking about current events, to see how well the person responded to everyday conversation. Although analysis of the different disciplines showed variation in methodologies, professionals in all three fields appeared to use a combination of formal assessment tools, informal observation of the elder's conversational ability and general functioning, and consultation with others when making an assessment of an elder's capacity. Respondents appeared flexible in the use of these methods in order to make the process as comfortable as possible for the elder while providing sufficient information to assess the elder's abilities.

THE LOS ANGELES COUNTY ELDER ABUSE FORENSIC CENTER: USING SYNERGY TO ADVANCE POSITIVE OUTCOMES

A.E. Navarro¹, K. Wilber¹, D. Schneider², *1. Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Keck School of Medicine, University of Southern California, Los Angeles, California*

Synergy is the close coordination of the efforts and resources of individuals working together so that the performance of the whole is greater than the sum of its parts (Dahl, 2000). This presentation focuses on outcomes from activities at the Los Angeles County Elder Abuse Forensic Center, the second such multidisciplinary center in the nation. Center goals are to: 1) improve communication and coordination between county staff, 2) increase opportunities to achieve justice and improved client welfare, and 3) improve awareness and knowledge about the crime of elder and dependent adult abuse and neglect. Mixed methods included statistical analyses of survey data from members and presenters, along with tracking of center activities among the team members. Over 313 clients have been reviewed, with 98 Office of Public Guardian investigations, 65 home-based medical assessments, 69 neuropsychological evaluations and 52 prosecutor reviews to date. Process evaluation found excellent attendance (83%), high presenter satisfaction (4.6/5) and broad reaching awareness and training activities (7,258 individuals in 2008). Next steps are to focus on improving the measure of outcomes to improve our understanding of the significance of the Center's impact. Following this presentation, participants will have a preliminary model for tracking and evaluating the outcomes of an elder abuse forensic center. Findings amassed to date, suggest this model has the potential of becoming a standard tool in the fight to combat elder and dependent adult abuse. This project includes private support from the Archstone and Uni-Health Foundations.

SESSION 1205 (SYMPOSIUM)

AGING IN PLACE: AGING AT HOME AND AGING IN COMMUNITIES

Chair: *E. Hwang, Gerontology Research Centre, Simon Fraser University, Vancouver, British Columbia, Canada*

Discussant: *G. Gutman, Gerontology Research Centre, Simon Fraser University, Vancouver, British Columbia, Canada*

The purpose of this symposium is to explore the roles of the different levels of the built environments in understanding aging-in-place. Aging-in-place has several connotations beyond the simple phenomenon that older adults remain in the same home and community for their life times. It refers changes in both the personal and built environments. There are changes in the built environments and these changes are generally accompanied by frailty as a person ages. Addressing this at the global level, the ultimate goal of the team funded by the British Columbia Network for Aging Research (BCNAR) Team Development Grants, Canada, is to produce a cross-level conceptual framework to study aging-in-place. The symposium will start with the various ways of defining "aging-in-place." Sixsmith will show the different scopes of aging-in-place at lifetime home and lifetime communities in the United Kingdom with theoretical aspects. Then, Ziebarth will look at issues at the community level discussing local regulations and community initiatives encouraging aging-in-place in Minnesota, the United States. Hwang will reflect what it is like to age in a foreign country taking examples from Chinese and Korean communities in Metro Vancouver area, Canada. Finally, from more macro-level, Gutman will conclude with implications for policy makers and reflection on aging-in-place.

CARE RESPONSIBILITY AMONG OLDER ADULTS IN SWEDEN: EVALUATING THE NEW REALITY

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Although older adults in Sweden have long enjoyed high levels of Home Help Services, demand has far outpaced availability. Recent declines in Home Help Services have resulted in a greater role for informal carers. We know little about how attitudes and perceptions correspond with this new reality. Using representative data from the First Survey of the Swedish Association of Retired Persons (SPF, 1,035 individuals, 98% 65+, collected in late 2008), we establish perceptions of responsibility for care, actual and preferred. Care involvement is high with 20% reporting they were current caregivers and 30% reporting past care responsibilities (9% both). Caregivers' help often (40%) overlaps with public support. Strains on carers are also indicated. Participants reported a strong preference to remain in their own home with a blend of family support and public services, and many more preferring private assisted living facilities than public residences. 23 % presently receive help themselves (14% from family alone, 3% public alone, 5% combined). Most perceive shared responsibility between family and state. Few (6%) perceive the family as solely responsible for elder care, 26% attribute main responsibility to family with public supports; 37% attribute main responsibility to public sources with family support, and 15% see the state as wholly responsible. Although most individuals endorse a mixed family-public solution, most want the point of balance moved in the public direction. Results suggest successful policies will need to simultaneously balance needs of older adults and their families.

PROMOTING AGING-IN-PLACE IN MINNESOTA, USA

A. Ziebarth, *Housing Studies Program, University of Minnesota, St Paul, Minnesota*

Aging in place with dignity requires more than an accessible dwelling that allows for on-going independent living. Housing satisfaction research clearly identifies neighborhood characteristics as key factors for the quality of life people experience as they grow older. Research conducted in Minnesota examines the state policies, local regulations, and community initiatives that are designed to encourage aging-in-place. The findings provide guidelines for effective policy directions and note concerns regarding the implementation of policies for truly creating livable communities. Following this session participants will be able to identify policies that promote aging-in-place and will be able to evaluate the effectiveness of these policies in creating livable communities for older residents.

A CONCEPTUAL FRAMEWORK FOR AGING-IN-PLACE

A. Sixsmith, *Simon Fraser University, Vancouver, British Columbia, Canada*

This paper takes a phenomenological perspective to develop a conceptual framework for the idea of aging-in-place and its relation to quality of life. The value of this conceptual modeling is that it allows researchers to make explicit all the relevant aspects of a problem area and provide ideas about inter-relationships between these different aspects. At its simplest level the model comprises three attributes of everyday experience- "being", "doing" and "meaning". "Being factors" refer to the attributes of the older person along with the context within which they live that have a direct bearing on well-being. "Doing factors" refer to the everyday activities of a person, such as activities of daily living (ADLs), leisure, social interaction, health related activities. Meaning factors refer to the subjective aspects of well-being, or the subjective meanings, associated with a person's everyday situation and activities and subjective well-being outcomes, such as happiness and life satisfaction.

GROWING OLD IN CANADA: CHINESE AND KOREAN SENIORS IN METRO VANCOUVER

E. Hwang, *Gerontology Research Centre, Simon Fraser University, Vancouver, British Columbia, Canada*

The purpose of this study was to analyze the characteristics of Chinese and Korean seniors residing in ethnic-concentrated neighborhoods in Metro Vancouver, Canada. The data were collected using both face-to-face interviews for 99 participants (50 for Chinese and 49 for Koreans) with structured questions and two focus group interviews with 15 participants. To compare group differences between Chinese and Koreans, t-tests were conducted and cultural uniqueness was highlighted. Chinese seniors tended to actually use/walk to various local amenities (e.g., community centres, ethnic grocery stores, parks, gyms, doctor's office, and library) more frequently than Korean seniors. On the other hand, more Koreans intended to plan to move out from their current housing in the next 3 years, but there was no significant difference in terms of overall satisfaction and sense of community in the two groups.

SESSION 1210 (SYMPOSIUM)

DIRECT CARE WORK ACROSS SETTINGS: COMPLEXITIES, CULTURES AND CONTEXTS IN CANADA, ISRAEL AND THE USA

Chair: A. Martin-Matthews, *Sociology, University of British Columbia, Vancouver, British Columbia, Canada*

Discussant: M. Gillis, *Health Human Resources Strategies Division, Health Canada, Ottawa, Ontario, Canada*

Direct care workers (nursing assistants, home health and home care aides, personal care workers, and personal service attendants) are considered the 'eyes and the ears' of the care delivery system. They provide hands-on care to millions of elderly people worldwide, in settings ranging from private homes, to assisted living and other residential care options, to nursing homes. In the USA, direct care workers provide an estimated 8 out of every 10 hours of paid care received by clients of long-term care services. While these workers are typically depicted as marginalized, poorly paid and (often) immigrant women of colour with little training and brief tenure working in this sector, their characteristics and circumstances are in fact more varied than this depiction. This Symposium compares and contrasts the nature of direct care work across settings, and examines workload and job configuration and the impact of worker characteristics on quality of care and relationships with clients. Four papers examine data: from direct care workers employed as home (domiciliary) support workers in two provinces of Canada; live-in foreign home care workers in Israel; and direct care workers in two work environments (community health centers and assisted living facilities) in two states of the USA. A senior policy analyst in Health Human Resources in the federal government of Canada will discuss the policy implications of these transnational comparisons. This Symposium informs the understanding of direct care work and characteristics of workers across jurisdictions, between public and private spheres of work, and across nations.

THE MANY ROLES OF FOREIGN HOME CARE WORKERS UNDER THE LIVE-IN SYSTEM IN ISRAEL

L. Ayalon, *Bar Ilan University, Ramat Gan, Israel*

PURPOSE: The present study evaluates the roles of foreign home care workers, who provide care to older adults, under the live-in system in Israel. METHODS: Qualitative interviews with 22 family members and 29 Filipino home care workers were conducted. Interviews were analyzed thematically. A survey of 259 Filipino home care workers about their working conditions also took place. RESULTS: The role of live-in foreign home care workers often includes not only physical care, but also emotional and social care. The blurred boundaries that characterize this profession account for some of the abuse experiences reported by workers. IMPLICATIONS: Foreign home care workers' job descrip-

tion needs to be redefined to acknowledge the substantial social and emotional care they provide. Greater clarity concerning their job description may result in a better work environment.

“WE DO IT ALL”: UNIVERSAL WORKERS IN ASSISTED LIVING

C.L. Kemp¹, M. Ball¹, C. Hollingsworth¹, M. Lepore², 1. *Georgia State University, Atlanta, Georgia*, 2. *Brown University, Providence, Rhode Island*

Assisted living (AL) is a burgeoning industry, but like the broader long-term care sector it is strained by an endemic shortage of direct care workers (DCWs). Yet, little has been written about these workers in AL, especially their job experiences. This paper explores DCWs' daily work using data from a state-wide study involving 45 AL facilities in Georgia. Our analysis draws on surveys with 370 DCWs and in-depth, qualitative interviews with 41 DCWs and 44 administrators. Across all facilities and job positions, DCWs are essentially universal workers who do much more than hands-on care. Workload varies, often by job configuration, but 42% of DCWs feel pressed to complete daily tasks. Facility size, staffing levels and resident impairment levels are among the factors influencing work experiences. Ultimately, task configuration and workload influence DCWs' relationships with residents, which are the most satisfying aspects of their job and contribute to retention.

HOME CARE SERVICES TO ELDERLY CLIENTS: THE LABOUR OF CAREWORK IN A CANADA

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Home Care is the fastest growing sector within health services delivery in Canada. Each province has its own home care program, with the result that where one lives, and not what one needs, determines the nature of service received. This paper focuses on the non-medical (sometimes called non-professional or unregulated) workforce within Home Care. Using data from semi-structured in-depth interviews with 119 home support workers in British Columbia and 40 in Nova Scotia, the nature of the care work, as shaped by the rules and regulations of provincial agencies, is examined. Work stress and job satisfaction are influenced by relationships with clients, safety concerns, scheduling and compensation, and the unpredictable nature of work marked by continual changes in the work schedule and environment. Ethno-cultural characteristics, immigrant status and skills training vary considerably among the workers from these two provinces, with implications for recruitment and retention of workers.

DIRECT CARE WORKERS IN COMMUNITY HEALTH CENTERS: PROVIDING CARE FOR UNDERSERVED POPULATIONS

J.C. Morgan¹, J. Dill^{2,1}, 1. *UNC Institute on Aging, Chapel Hill, North Carolina*, 2. *UNC Chapel Hill, Sociology Department, Chapel Hill, North Carolina*

Demographic and workforce aging is expected to lead to an increase in the demand for frontline healthcare workers, including those working in community health centers. Community health workers (CHWs), like most careworkers, play a critical yet under-recognized role in delivering needed care to underserved populations. The purpose this paper is to describe the work of CHWs, the demographic characteristics of this workforce, common barriers to giving good care, relationships with clients and how they find meaning in these jobs and their carework. The data for this paper come from focus groups and surveys with CHWs (6 FGs, 144 surveys) and supervisors (6 FGs) in community health centers in the U.S. We find that wages are generally low (\$11.40 median wage), workloads are high, and community members are over-represented in low level CHW work. CHWs have a strong community-needs

orientation, which can lead to challenges in maintaining professional boundaries.

SESSION 1215 (SYMPOSIUM)

DRIVING AND EARLY STAGE DEMENTIA: IMPROVING SAFETY WITH NATURALISTIC DRIVING DATA

Chair: D.W. Eby, *UMTRI, Ann Arbor, Michigan*, M-CASTL, *Ann Arbor, Michigan*

Discussant: M. Porter, *University of Manitoba, Winnipeg, Manitoba, Canada*

Driving presents a significant safety issue for persons with dementia. Because dementia impairs judgment and the ability to plan, driving decisions involve greater family and community input than with other older drivers. Fitness to Drive in Early Stage Dementia, an Alzheimer's Association-funded project, provides a unique interdisciplinary approach to examining driving decisions and driving performance in naturalistic settings utilizing vehicle instrumentation. Actual driving data will be used to identify and report problematic driving performance to drivers, their families, and therapists in order to supplement traditional assessments of fitness to drive. Thus the potential of onboard technology to augment current practice will be explored. The research team draws on expertise from gerontology, psychology, social work, and transportation engineering and technology. This symposium will report the results of Phase 1 of this 3-year study. Specifically, the co-investigators will describe the background of the study; state results of an expert panel meeting which identified critical behaviors associated with dementia that may impact safe driving; examine themes identified from a series of focus groups with drivers, family members and driver rehabilitation specialists; report on the development of algorithms to monitor on-road driving performance and in-vehicle instrumentation; and conclude with next steps of exploration.

DRIVING AND EARLY STAGE DEMENTIA: PROGRAM OVERVIEW

D.W. Eby, *SBA, UMTRI, Ann Arbor, Michigan*

Recent advances in technology provide a method for automatically collecting detailed information about a person's driving ability. This technology can be used to monitor the driving behavior of individuals diagnosed with early stage dementia and provide guidance on how often these drivers need to be assessed, and investigate the validity of recommendations of clinicians, family members, and self-screening. The specific aims of this exploratory study were to: 1) demonstrate the feasibility of using in-vehicle data collection to monitor driving actions of persons with early stage dementia; 2) compare the validity of multiple forms of assessment of driving skills with naturalistic driving in persons with early stage dementia; 3) bring greater visibility to deficits in driving performance unique to people with early stage dementia; 4) increase understanding of behaviors and issues of drivers with dementia and their families; and 5) inform decision-makers about appropriate intervals for checking driving competency.

USING OBJECTIVE DRIVING DATA IN COMPETENCE ASSESSMENT OF DRIVERS WITH EARLY STAGE DEMENTIA

N.M. Silverstein, A. Gottlieb, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

The perspectives of ten triads (persons with dementia, family members, and specialists in driving assessment/occupational therapy) were compared to empirical data on on-road performance gained through in-vehicle monitoring of the drivers' cars for at least one month totaling over 700 trips and 3000 miles. In-person pre and post instrumentation surveys were conducted with the persons with dementia and their family members. A post instrumentation survey was conducted in-person with the driving specialist. The triad attended a debriefing that

included a summary of how the driver performed on the instrumentation measures. Finally, a telephone follow-up was conducted post instrumentation with the family member to assess changes in driving status and recommendations followed. The research was useful in noting areas of validation of driving status across self-screening, family and specialized assessment as well as highlighting where greater sensitivity in measures may be needed.

COMPARING OBJECTIVE PERFORMANCE OF EARLY STAGE DEMENTIA DRIVERS TO MULTIPLE FORMS OF ASSESSMENT AND COGNITIVELY INTACT DRIVERS

L.J. Molnar, *Transportation Research Institute, University of Michigan, Ann Arbor, Michigan*

Findings from two sets of analyses are discussed in this presentation. The first set of analyses compared multiple forms of assessment of driving skills with naturalistic driving in individuals with early stage dementia. In these analyses, critical driving skills were used as the framework for comparing the assessments of the Certified Driving Rehabilitation Specialist (CDRS), the family member, and the driver, to the objective measures of driving obtained through the in-vehicle monitoring. Included in these analyses was the determination of whether or not the driver adhered to the driving recommendations provided by the CDRS in her initial assessment of the driver prior to enrollment in the study. The second set of analyses compared the objective driving measures obtained in the present study to similar measures obtained from previous in-vehicle monitoring studies of non-early stage dementia drivers to determine if drivers with early stage dementia exhibit unique driving characteristics.

DOES VEHICLE INSTRUMENTATION MAKE A DIFFERENCE? A COMPARISON GROUP PERSPECTIVE

G. Adler, *UH, Houston, Texas*

With additional support from the University of Massachusetts Transportation Center (UTC), a comparison group of drivers similar to those enrolled in the Alzheimer's Association project was recruited to participate in a comparison study. This group of drivers, like those enrolled in the prior project, were evaluated and deemed safe to drive by a driving specialist/occupational therapist following a formal assessment, however following their evaluation the drivers did not have their vehicles instrumented. They, along with a collateral source of information, completed surveys querying them about the drivers' habits and behaviors behind-the-wheel as well as driving decision-making. One month later a follow-up call was placed to the collateral source for information about the driver's situation and changes in status. The additional perspectives provide value-added benefit to the initial project further assessing the impact of instrumentation on driving behaviors and decision-making and the extent to which such instrumentation serves as an intervention.

INSTRUMENTING VEHICLES FOR OBJECTIVE MEASURES OF DRIVING

D. LeBlanc, *Univ of Michigan, Ann Arbor, Michigan*

Objective measures of travel patterns and driving performance were obtained for ten drivers by installing an instrumentation set on each of the drivers' own vehicles. This data set includes continuous capture of speed, geographic location, time of day, accelerations, yaw rate, brake use, transmission gear, turn signal use, distance to vehicles ahead, cabin audio, and video capturing in-vehicle and external situations and events. The performance measures include: travel pattern characteristics, wayfinding errors, following distances, negotiation of traffic signals and stop signs, pedal/gear confusion, and turn signal use. These metrics were presented to the driver, their caregiver, and their driving rehabilitation specialist to determine whether objective driving information influences their perspectives or decisions. This presentation describes

the instrumentation, measures, and highlights of the findings within the objective data analysis itself.

SESSION 1220 (PAPER)

FAMILY CAREGIVING - SRPP PAPER SESSION

SERVING RURAL GRANDPARENTS RAISING GRANDCHILDREN: A COMPILATION OF PROMISING PRACTICES

M.A. Adle, J. Crittenden, L.W. Kaye, *Center on Aging, University of Maine, Bangor, Maine*

There are 2.4 million grandparents raising grandchildren nationwide facing the challenges of caring for children while they, themselves, are aging. For these and other relative caregivers living in rural areas, those challenges are often compounded by a lack of accessible resources and too few services that effectively meet the unique needs of rural families. The UMaine Center on Aging, with funding from the Brookdale Foundation, undertook a study of the service delivery needs of rural relatives as parents. In addition to a review of program reports and research literature, an online exploratory survey was conducted with practicing professionals (N=48), interviews were conducted with 25 direct-service professionals/key experts in the field, an online follow-up survey (N=41) was administered to professionals in the field, and interviews with 10 caregivers were carried out to augment data collected from professional contacts. Findings confirm that a rural caregiver's isolation from needed services, as well as the unique social dynamics of living in a rural area, requires that service providers alter service provision to adequately address the needs of such families. Fierce family loyalty, strong informal support networks, and personal strength/resilience serve rural families well. Preferred rural-specific program strategies include the use of distance technologies, mobile service units, transportation and financial assistance, innovative collaborations and other customized methods of outreach and service provision. The final product of this translational research will be compiled into the Promising Practices Manual for Operating Rural RAPP Programs for practitioners who intend to develop grandfamily programming in rural areas.

CHANGING ATTITUDES TOWARD LONG-TERM CARE PROVISION FOR AGED PARENTS AMONG SANDWICH GENERATION

E. Yoon, *School of Social Work, Jackson State University, Jackson, Mississippi*

Despite social changes such as geographic mobility, weakened inter-generational cohesion, and women's participation in the labor force in South Korea, adult children remain the most reliable of instrumental social support to their parents. What accounts for the willingness of adult children to serve the needs of their aging parents? The specific aim of this research is to investigate the changing forces that guide adult children into their roles as providers of support to older parents. A study of 943 individuals between the ages of 20 and 59 addressed research questions throughout self-administered questionnaires. The study results discovered middle-aged adults' transitional norms toward family caregiving for aging parents: They still believed in the responsibility of families to care for their aging parents, but strongly expressed the needs for creating more affordable formal services and programs designed for physically and cognitively impaired old adults. The overall attitude and pattern of differences by gender is compatible with a traditional division of social support labor. Whereas sons expressed reluctant attitude toward using formal services such as respite care or nursing home care, daughters-in-law tended to have ambivalent sentiment of their roles as primary caregivers and willingness to use intervention programs. This study suggested that the amount of responsibility that adult children feel their generation should have for assisting elderly parents be a powerful predictor of helping behavior across generation.

THEY HAVE IT IN THEIR BLOOD, WE HAVE TO STUDY FOR IT: NOTIONS REGARDING MIGRANT CARE WORKERS' PRESUMED SUITABILITY TO PROVIDE CARE IN OLD AGE

S. Torres, 1. Linköping University, Norrköping, Sweden, 2. Mälardalen University, Västerås, Sweden

The globalization of international migration has changed the ethnic composition of Swedish society. The elderly care sector is no exemption since a large number of care recipients and care providers are not ethnic-Swedes these days and elderly care planners need nowadays to know how to diversity manage their workplaces. Departing from this state of affairs a project was launched to shed light on how assumptions regarding ethnic and culture-different 'Others' affect the quality and user-friendliness of Swedish elderly care. Ethnographic data has been collected over a period of sixty days resulting in 300 hrs of participant observation (generating 152 pages of observation protocols and an additional 30 pages of field notes including observation drawings, setting descriptions and context-specific debriefing notes) and a total of 37 semi-structured interviews (26 with care providers, 8 with care recipients and 3 with their relatives). This presentation will focus on the notions regarding migrant care workers' presumed suitability to provide care in old age that were uncovered and the implications that these have for ethnic relations between staff members. The division of labor between staff that these notions unintentionally bring about will also be discussed in an attempt to problematize how multiculturalism can challenge the manner in which we think about what constitutes high quality and user-friendly care in old age. The implications that globalization has on gerontological practice will also be explored since the project empirically shows how multiculturalism impacts everyday practice in nursing homes.

"GOING THROUGH THE STORM": THE RELATIONSHIP BETWEEN CAREGIVING GRANDMOTHERS AND INCARCERATED MOTHERS

P.W. Bell, Governors State University, University Park, Illinois

Purpose: In Illinois, 80% of incarcerated women were mothers to more than 7,500 children (LaLonde & George, 2002). As a result of maternal incarceration, grandmothers became the primary caregivers to over 50% of their grandchildren (Mumola, 2000; AIUSA, 2000). Despite the large number of grandmothers parenting, there is little known about the grandmother-mother relationships prior to incarceration. This study examines grandmother-mother relationships, and analyzes how grandmothers' inherited their caregiving responsibilities. Methods: Forty in-depth semi-structured interviews were conducted with 20 incarcerated mothers and 20 grandmothers. Data collection and analysis applied critical ethnography (Carspecken, 1996), and Relational Cultural Theory (Miller & Stiver, 1997). There were two stages of analysis: 1. Transcribed interview data were managed, coded and thematically analyzed through the use of qualitative analysis software NVivo (Richards, 1999); and 2. Clustered matrices (Miles & Huberman, 1994) were composed based on developmental stages and pivotal events. Results: The findings revealed grandmother-mother relationships changed based on the mothers' developmental stages. Factors related to the dyadic disconnections were: a) childhood and early adolescence substance abuse, b) sexual abuse, c) family violence, and d) exposure to gangs. The burden of substance abuse and arrest forced grandmothers to parent their grandchildren on a formal, informal, and temporary level. Implications: This study contributes to social work research by providing an in-depth analysis on how factors influence the grandmother-mother relationships across the mothers' lifespan, and how these relationships vary based on the grandmothers' health, levels of care-giving, and the resources received to help grandmothers raise their grandchildren.

SESSION 1225 (POSTER)

HOME AND COMMUNITY BASED CARE - POSTER

HOW OLDER ADULTS RESPOND TO HOME-BASE MONITORING: RESULTS OF A SURVEY FROM THE OREGON BIO-MEDICAL RESEARCH PARTNERSHIP STUDY

L. Boise, K. Wild, N.C. Mattek, M.E. Zenorini, Layton Aging & Alzheimer's Disease Center, Oregon Health & Science University, Portland, Oregon

Increasingly, researchers are using computers and home monitoring technologies to study older adult behavior and to identify changes in health and behavior in home settings. Yet, we have little information from older adults themselves about how they respond to such technologies. This poster will present results from a survey administered to 158 persons aged 69 - 92 at baseline in the Biomedical Research Project (BRP) funded by NIA (mean age: 84 years, mean education: 15 years, 74% female, 52% living alone). This survey asked study participants about their computer use, how important they thought monitoring was for assessing possible changes in behavior and functioning and concerns about privacy or possible misuse of data. Responses were compared according to gender, living status, and cognition (normal vs. mild cognitive impairment). The results showed that over half of the subjects used their computer daily, most often for email communication and playing games. Subjects thought monitoring for health changes was important overall, although about two-thirds reported being concerned that their information could be exploited. Subjects were overwhelmingly willing to have their activity monitoring information shared with their doctor (90%), less so for their computer (76%). Male participants were significantly more concerned about privacy than females. Subjects with normal cognition were more likely to be concerned about who might have access to their information than the cognitively impaired. The results of this survey have important implications for managing and controlling the growing use of computers and other technologies for researchers to study older adults.

POLICING A GRAYING POPULATION: A STUDY OF POLICE CONTACTS WITH OLDER ADULTS

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Over the course of the coming decades America will collectively turn "grayer" as members of the Baby Boom cohort join the ranks of older adults. These demographic trends will likely impact police organizations and the job of street-level patrol officers. Existing scholarship on police contacts with older adults has focused predominantly on the issue of criminal victimization; however very few studies have been designed to provide data on the typical interaction between police and older adults. The present study uses direct observation of police officers to offer a more complete description of these interactions than those developed through surveys or studies based on official records. Police interactions with a total of 340 adults age 60+ are described by reason for contact and role enacted by older adults within the encounter. Our findings demonstrate the importance of non-crime related service demands of older adults to community policing and the need to move beyond research approaches focused solely on responding to older adult victims of crime. Suggestions for future research and the policy implications of demographic shifts on police organizations are discussed.

CASE MANAGERS IN COMMUNITY-BASED CARE: PERCEPTIONS OF COMPLEXITY IN A REWARDING WORK ENVIRONMENT

E. Slominski, Miami University, Oxford, Ohio

As policies in the last two decades have shifted toward community-based care, case managers have become an increasingly important part

of the delivery system. Serving as the mediator between older adults needing care and the service providers, case managers often take two positions: an advocate for consumer needs and a regulator of care costs for adults experiencing a chronic disability (Dill, 2001; Applebaum and Austin, 1990). Due to this increasing level of job-related role complexity, understanding the experiences of community-based case managers is becoming even more crucial. Therefore, a qualitative approach is necessary to attain the voices of the case managers and how they personally view their experiences in community-based care. This study explored the perceptions of eleven case managers in two community-based care programs through the use of in-depth interviews. Empirical findings include: an increased level of complexity related specifically to working in community-based care (e.g., discretion and home visits) and also a general high level of variability in many facets of the job. However, there was a high level of support for both the shift to community-based care and the case managers' position within this area of long-term care. This high level of support appears to create both personal and professional rewards that counteract occupational stresses. Based on these findings, implications and future research possibilities will be discussed.

EMPOWERMENT AND PERSONAL CONTROL IN LATER LIFE: THE EXPERIENCE OF CONSUMER DIRECTION

K. Niles-Yokum, *Behavioral Sciences, York College, Sutton, Massachusetts*

In general, policy-makers and program developers have viewed age as a deciding factor when developing programs and services in the United States. The prevailing service philosophy has been that older adults, by virtue of age alone, are in need of intervention. The network of services for the aging has evolved primarily as an agency model, limiting the autonomy of the older person in favor of 'professional' judgments. This qualitative study was an exploration of the factors that influence the degree to which older adults actually direct their own care in a consumer-directed model of services and supports. Findings from interviews with consumers, caregivers and case managers across three states revealed four key factors that play a role older adult's empowerment (or lack of) in directing their own care. These include 1) whether the consumer had a family or non-family care worker, 2) attitudes about old age, 3) consumers perceptions of choice and control, and 4) prior care experiences. Results provide important insight into the planning and implementation of service models for the elderly and highlight the need for an increased awareness of the importance of empowerment and personal control in later life.

THE ROLE OF PSYCHOSOCIAL FACTORS IN LONG-TERM CARE UTILIZATION AMONG ELDERLY CHINESE

V. Lou¹, E. Chui¹, A. Leung¹, C. Kwan¹, I. Chi², E. Leung¹, *1. The University of Hong Kong, Hong Kong, Hong Kong, China, 2. University of Southern California, Los Angeles, California*

Aims: This study aims to examine the role of psychosocial factors associated with the choices of community-based long-term care services for elderly Chinese people in Hong Kong. **Method:** The survey method was adopted using multi-stage sampling. A standardized questionnaire was designed based on Anderson's Health Behavioral Model. A total of 435 elderly people were interviewed successfully. Among them, about 37% were male; close to 45% did not have formal education, and about 56% were not married. 23% were cared for by spouses; about half were cared for by children. **Results:** The study tested the expanded Anderson model empirically on its enhanced power to explain long-term care utilization by including psychosocial factors. As hypothesized, psychosocial factors contributed the largest explained variance (changedR² = 0.1663) to the differentiated utilization of long-term care services, followed by needs characteristics (changedR² = 0.1590) and enabling characteristics (changedR² = 0.1028). On top of needs factors (i.e. level of impairment in daily living and cognitive functioning), and enabling factors (i.e. financial considerations), older adults who

chose to stay in the community were more likely to have positive attitudes towards community-based services, higher levels of family solidarity (i.e. the availability of caregivers in the same household and the primary caregivers being economically inactive), and preferences for staying in the community. **Conclusion:** To achieve 'Aging in place' in a Chinese context such as Hong Kong, psychosocial factors in regards to attitude, family solidarity, and service preference need to be taken into consideration in program planning and policy development.

DEMOGRAPHY OF ASSISTIVE TECHNOLOGY USE AND PERSONAL ASSISTANCE: RACE, GENDER AND AGE FACTORS

S. Levien, J. Burr, *UMass Boston, Boston, Massachusetts*

The objective of this study is to describe the use of assistive technology (e.g., cane, wheel chair) and the receipt of personal assistance among middle-aged and older persons who report at least one mobility limitation. We focus on race and ethnic (Hispanic) differences and investigate whether the effects of race and Hispanic status are modified by age and gender. For cultural, economic, and health reasons, we expect differences in the (a) likelihood of using assistive technology, (b) number of devices used, (c) receipt of personal assistance and (d) unique combinations of device use and personal assistance. Understanding these differences may be helpful from a policy perspective (quantity and quality of long-term care) as well as for health care service providers. We use data from the 2006 Health and Retirement Study to estimate our models, controlling for health and disability status, health insurance, contact with health care service providers, family characteristics, and education. For assistive technology use, we find non-Hispanic blacks are more likely than non-Hispanic whites to use at least one device and to use more devices. Blacks are also more likely to receive personal assistance than non-Hispanic whites. Blacks are more likely than whites to use only devices as compared to using no devices or personal assistance only. Blacks are also more likely than whites to use both devices and personal assistance as compared to using neither a device nor personal assistance. No differences between Hispanics and non-Hispanic whites were found for either assistive device use or personal assistance.

USING NURSE PRACTITIONERS TO EVALUATE AND ADDRESS THE VISION CARE NEEDS OF THE HOMEBOUND ELDERLY OF NEW YORK CITY

A. Zaldivar, N. Brennan, T. Cortes, V. Torres-Suarez, *Lighthouse International, New York, New York*

Vision loss is one of the leading causes of disability and loss of independence among older adults. Vision impairment often prevents seniors from venturing outside their homes adding to rapidly growing pool of seniors with debilitating medical and mobility issues that are homebound. Seniors with vision impairment are also at high risk for falls and medication errors. The Lighthouse International has launched an innovative pilot program using nurse practitioners to evaluate and address the comprehensive eye and safety issues of the homebound elderly. This creative pilot program is executed by the only two Geriatric Nurse Practitioners (GNPs) in the country with a specialization in vision care. The GNPs' breadth of medical knowledge, combined with their intensive training in vision, puts them in an excellent position to deliver unprecedented holistic care to homebound elderly patients. To date, the Nurse Practitioner Homebound Elderly Program pilot has visited over 40 seniors throughout New York City. Initial data reveal a large percentage of homebound seniors that meet the criteria for being legally blind. The nurse practitioners were able to provide necessary at home vision testing to complete state mandated documentation. Completed documentation allowed seniors to access an array of services available to legally blind residents. Another subset of seniors seen through the pilot were provided with much needed updated eye glasses, allowing some participants to correctly read their medication labels. The Lighthouse International evaluation department is currently working to assess whether

this model of delivering vision care by nurse practitioners can contribute to the healthy aging of seniors who are confined to their homes.

BUILDING POSITIVE INTERGENERATIONAL RELATIONS: LESSONS FROM IRELAND

L.E. Carragher, A. Marron, P. Kerins, R. Bond, *DKIT, Dundalk, Ireland*

Introduction Loneliness is a common feature of the lives of many older people, and is linked to impaired quality of life, greater need for institutional care and increased mortality (Routasalo & Pitkala, 2003). This study explores a unique model of volunteering for health and social care students, aimed at improving intergenerational relations and contributing to a societal cultural shift linked to ageism whilst also improving the overall quality of life of older people. Testing new interventions to alleviate loneliness may be particularly important given societal loosening of social ties. Method Ten students enrolled on health and social care degree programmes were matched with twenty community-dwelling older people. Students visited participants in their homes each week to develop trust relationships, listen to their life stories and devise appropriate activities to improve participants' quality of life. Results Students engaged in a range of activities, such as taking participants to visit friends now living in nursing homes and with whom they had limited contact. "Browse shopping" was found to be particularly popular. Participants appreciated "having time" to browse rather than the usual "rushed weekly shopping and the noise from grandchildren." Overall, the programme was found to be a mutually beneficial. Students experienced positive changes in attitudes towards older people (measured on a 27-item scale), while older adults reported higher levels of quality of life. Conclusion Findings point to the importance of pedagogical strategies that cross professional disciplines and the positive impact this can have on intergenerational attitudes and ultimately service provision.

SESSION 1230 (SYMPOSIUM)

INVOLVING OLDER PEOPLE IN RESEARCH AROUND THE WORLD

Chair: K. Fitzgerald, *Swansea University, Swansea, United Kingdom*

Discussant: J.E. Phillips, *Swansea University, Swansea, United Kingdom*

This symposium will take an international look at how and why different countries are involving older people in research. In recent decades, disability movements have argued that people with disabilities have a right to be involved in research. One could similarly argue that both morally and ethically older people have a right to be involved in research about older people. Research findings impact on the development of policy and practice, and therefore affect the lives of those 'being researched.' Aside from the ethical and moral reasons for including older people, there are practical reasons. Older people are a valuable resource and have a wealth of lifetime experience on which to draw. Some have particular skills that can bring refreshingly new elements to a project. In addition, it is practical to include older volunteers as they are more likely to be able to interview peers with a lower refusal rate and have a personal understanding of the topic under study. The involvement of older people means that there are innovative approaches to research. Subsequently, older volunteers and academics as co-researchers can learn from each other. Governments and funding agencies are becoming aware of this and are beginning to require user-involvement in research proposals. Each of the presenters will discuss the moral, ethical and practical reasons why older people should be involved in research in their country and arguable around the world.

INVOLVING OLDER PEOPLE IN RESEARCH: WHAT HAVE WE LEARNT SO FAR?

J.E. Phillips, *Swansea University, Swansea, United Kingdom*

Placing older people at the heart of the research process is believed to be critical if services are to be tailored to the needs of communities

and individuals. Further advantages are seen through the acquisition of new skills and knowledge, increased self esteem and confidence amongst older people and researchers. Such participatory approaches also contribute to the interpretation of results and policy formation. The presentation will draw on the advantages from such engagement through a number of projects in the OPAN Wales network as well as look at the challenges that such engagement presents to older people as well as researchers. The presenter will also act as discussant to the papers submitted.

RURALWIDE: AN EXAMPLE OF ENGAGEMENT OF OLDER PEOPLE IN RESEARCH IN THE UNITED KINGDOM

V. Burholt¹, B.V. Riley², 1. *Centre for Innovative Ageing, Swansea University, Swansea, United Kingdom*, 2. *None, Corris, United Kingdom*

This paper describes the Rural North Wales Initiative for the Development of Support for Older People (RuralWIDe). RuralWIDe was a participatory research project. Volunteer older co-researchers were actively involved in conducting the research. They were trained in research methods, designed the questionnaire, undertook the fieldwork, analysed the data, helped produce the reports and summaries and disseminated the findings. Furthermore, members of three Older People's Groups took part in focus groups (N=120), which provided an opportunity for them to actively participate in the formulation of the research recommendations. In this presentation, Beryl Riley will talk about her experiences of being involved in this participatory research project from the perspective of an older volunteer. Beryl discusses the difficulties associated with interviewing in rural areas, the benefits of face-to-face interviews and the achievements of the project. Vanessa Burholt explores the benefits for other stakeholders and concludes with an argument for emancipatory gerontological research.

PARTICIPATORY RESEARCH ON QUALITY OF LIFE IN DEMENTIA: ADVANTAGES OF A NEW APPROACH TO IMPROVE RESEARCH

M. Martin, H. Schelling, C. Moor, *University of Zurich, Zurich, Switzerland*

In a three-year project aiming at measuring the quality of life in individuals with dementia living at home, we applied a participatory roundtable procedure. The study with 97 affected individuals and their care network was planned, conducted, and interpreted jointly by relatives, practitioners, and researchers. It did lead to a number of improvements in research quality. The group developed new theoretical models of the active management of dyadic quality of life in progressing dementia, developed new observation measures to be used by the relatives, improved access to the study population and increased validity of data interpretation. The key elements of the roundtable procedure, the main theoretical propositions, findings, and recommendations for aging research in general will be presented.

INVOLVING OLDER PEOPLE IN RESEARCH IN GERMANY

E. Schnabel, *Institute of Gerontology at Technical University of Dortmund, Dortmund, Germany*

On the background of demographic change and the ageing society, a high demand for research on older people in different fields can be stated in Germany. Within the policy shift towards more participation and user involvement in order to ameliorate public services, technologies and products for older people, more and more studies focus older people not only as objects of research, but as experts to be involved in the research process. A lot of instruments, e.g. user surveys, participatory strategies or senior research groups have been implemented since. The presentation will give an overview over current developments in different fields of research (health and care sector, products and technologies for older people) and will also raise methodological issues.

AUSTRALIAN RESEARCH INVOLVING OLDER PEOPLE

H. Kendig¹, J. Warburton², M. Carroll¹, H. Bartlett³, P. Matwijiw⁴, 1. *Faculty of Health Sciences, University of Sydney, Concord, New South Wales, Australia*, 2. *La Trobe University, Albury, Victoria, Australia*, 3. *Monash University, Melbourne, Victoria, Australia*, 4. *National Seniors Association, Canberra, Australian Capital Territory, Australia*

This paper explores Australian experiences of involving older people in undertaking research that potentially influences both public policy and the way that older people are portrayed in the media. The paper draws on the authors' experiences, from both University and consumer peak body vantage points, to assess the value and potential pitfalls in conducting research involving older people. We present a guiding framework for involving older people in community-based research. The guidelines are based on six fundamental principles: to acknowledge research as a process; clarify roles and levels of involvement; communicate effectively; recognise different expectations; and ensure both representativeness and diversity. This work was undertaken by the ARC/NHMRC Research Network in Ageing Well and the Australasian Centre on Ageing in partnership with National Seniors Association. In presenting these guidelines, we consider some of the tensions between researchers, funders and older people and suggest ways to constructively address them.

SESSION 1235 (PAPER)

PATHWAY TO AND FINANCES IN RETIREMENT

ARE INDIVIDUAL ACCOUNTS-PENSION REFORMS RETRENCHING IN LATIN AMERICA?

E. Calvo Bralic¹, F.M. Bertranou², E. Bertranou³, 1. *Center for Retirement Research at Boston College, Chestnut Hill, Massachusetts*, 2. *International Labour Organization, Santiago, Chile*, 3. *Matrix Knowledge Group, London, United Kingdom*

In 1981, Chile initiated old-age pension reforms that introduced mandatory funded individual retirement accounts (IRAs) and moved away from public systems. During the 1990s, nine other Latin American countries followed in Chile's wake. In recent years, even before the onset of the financial crisis, a second round of pension reforms was initiated to strengthen the public component and address the problems created by individual accounts. This article addresses whether IRA pension reforms are retrenching in Latin America. Although the idea is provocative, we conclude that the concept of "retrenchment" alone is insufficient to characterize the new politics of old-age pension reform. As opposed to the politics of the 1980s and 1990s, pension reform in Latin America in recent years has combined retrenchment with improvement of IRAs. With the exception of Argentina, which has re-nationalized its pension system, the magnitude in the second round of reforms seems to be less radical compared to the path-breaking changes introduced by the first round. The dominant policy prescriptions in vogue during the first round of reforms in Latin America have been clearly re-evaluated. The World Bank and other organizations that promoted IRAs have recognized that more attention should be paid to poverty reduction, coverage and equity, and to protect participants from market risks. The experience faced by countries that introduced IRAs, the changes in international financing institutions policies, and the recent financial volatility and heavy losses experienced in financial markets have tempered the enthusiasm of other countries from applying the same type of reforms.

ALTERNATIVE PATHWAYS TO RETIREMENT IN KOREA

J. Chang^{1,2}, L. Wu¹, H. Lee¹, 1. *Korea Labor Institute, Cresskill, New Jersey*, 2. *New York University, Visiting Scholar, New York, New York*

In this paper, we examine the Korean paradox of high levels of labor market participation among older Korean workers. In spite of relatively early ages at mandatory retirement and even earlier ages at actual retire-

ment, the Korean labor market is also characterized by high labor participation rates at older ages, with Korean labor force participation at later ages among the highest of OECD nations. Self-employment may play a key role in the labor force participation of older workers, with previous research documenting high levels of self-employment among mid-career workers (Chang 2003) and longer spells of employment among the self-employed compared to their salaried counterparts (Shin 2009). We use data from the Korean Longitudinal Study of Ageing to examine the transitions of salaried workers to self-employment or to retirement using a competing risk framework. Of particular interest are the labor force transitions of retirement-age workers during the Korean economic recession of 1997. We use a competing-risk framework to compare the transitions of retirement-age of Korean workers into retirement or to a different salaried job, and to compare such workers with those remaining in the workforce past the usual ages of retirement. Because salaried jobs in the Korean labor market are characterized by exclusive and hierarchical characteristics, we will examine if such "push" factors play a more important role in retirement decisions than "pull" factors such as the widespread but declining availability of self-employment. Overall, our analyses provide important clues to understanding why self-employment remains prevalent in the older Korea population during a 20-year period in which self-employment and the small business market has become a smaller part of the Korean national economy.

SOCIAL SECURITY REFORM: WOULD THE ADDITION OF A NOTIONAL DEFINED CONTRIBUTION PILLAR MAKE SENSE?

P. Yu, J. Williamson, *Boston College, Chestnut Hill, Massachusetts*

The current financial crisis has re-awakened the public's discussion about relying on the combination of traditional Social Security benefits and a 401(k) plan to support their retirement. Most analysts agree that some changes do have to be made relatively soon to make Social Security financially sustainable in the decades ahead, but there is also a need to reduce the number of workers left with inadequate economic resources during their retirement years. One reform option that has not been given adequate consideration for the United States is the addition of a Notional Defined Contribution (NDC) component. In several countries (Sweden, Poland, Latvia, etc.) a pillar based on the NDC model has been added as one component of a multi-pillar scheme and preliminary reports suggest that the approach is being well received. This paper describes the NDC model including its strengths and limitations. It discusses how it could be integrated into the current U.S. Social Security program. Then a comparison is made with two other alternative models, (1) the current combination of social security and voluntary 401(k) plans and (2) the proposed partial privatization of Social Security. Evidence drawn from other countries that have introduced NDC pillars to supplement their public defined benefit scheme suggests that this alternative has a number of advantages over the other two alternatives. The NDC model is a better alternative, but it is not a silver bullet.

DEMOGRAPHY IS NOT DESTINY NOR IS IT A SOUND RETIREMENT STRATEGY: AN ANALYSIS OF TARGET DATE FUNDS

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The combination of increasing life expectancy, concerns about insolvency of government managed pay-as-you-go programs, and the shift from defined benefit (DB) to defined contribution (DC) retirement savings vehicles has resulted in workers being more responsible for their financial security in retirement than ever before. Poor choices and lack of choice (inertia) on the part of workforce participants have contributed to inadequate levels of retirement savings. To address this issue, Congress passed the Pension Protection Act of 2006 (PPA). The legislation provided for automatic enrollment of employees in employer-sponsored retirement plans, automatic escalation of contributions, and qualified

default investment alternatives (QDIAs). This study evaluated the potential for target date funds (the current QDIA option) to provide income security. Two other options, customized target date funds and Treasury Inflation Protected Securities were analyzed. With their customized contribution rates, automatic escalation of contribution rates and greater diversification of funds the major finding was that Policy Option II, Customized target default funds would be the optimal choice of QDIA.

SESSION 1240 (SYMPOSIUM)

PROMOTING COGNITIVE HEALTH: A FORMATIVE RESEARCH COLLABORATION OF THE HEALTHY AGING RESEARCH NETWORK

Chair: J.N. Laditka, *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*

Discussant: W. Satariano, *University of California at Berkeley, Berkeley, California*

Growing evidence suggests healthy lifestyles may help maintain cognitive health, reducing risk of developing Alzheimer's disease and related disorders. The Healthy Aging Research Network (HAN), a group of 9 universities working collaboratively with their communities and the Centers for Disease Control and Prevention, is conducting formative research to design public health interventions promoting cognitive health. In 2005, the HAN began a four-year project to investigate: attitudes about healthy aging and cognitive health; language used to describe these issues; and attitudes about behaviors that have been associated with cognitive health. We examined the literature on promoting cognitive health, convened a national research meeting of experts in cognitive health and public health interventions, identified research questions, developed common focus group protocols, recruited and conducted focus groups, and analyzed resulting data. In 2006-2007, we conducted 80 focus groups and in-depth interviews with 614 participants at locations throughout the United States. Focus groups were in English, Spanish, Mandarin, Cantonese, and Vietnamese, and represented African Americans, American Indians, Asian Americans, Hispanics, non-Hispanic whites, caregivers, physicians and other health providers, and individuals with cognitive impairment. Each participant also completed a survey, with demographic and other information. This symposium provides selected results, focused on how people describe others with or without cognitive decline, concerns about memory and thinking, and beliefs about how to maintain our brains. The data provide a wealth of opportunities for better understanding healthy aging in the cognitive health context, and for designing effective public health interventions to promote cognitive health among diverse populations.

"MEDIA FOCUS ON ALZHEIMER'S AFTER THE LOSS": DIVERSE OLDER ADULTS' IDEAS ON KEEPING A HEALTHY BRAIN

D.B. Friedman¹, S.B. Laditka², J.N. Laditka², B. Wu³, R. Liu⁴, A.E. Mathews¹, W. Tseng⁵, S.J. Corwin¹, 1. *Health Promotion, Education, and Behavior, University of South Carolina, Columbia, South Carolina*, 2. *University of North Carolina at Charlotte, Charlotte, North Carolina*, 3. *University of North Carolina at Greensboro, Greensboro, North Carolina*, 4. *Epidemiology & Biostatistics - University of South Carolina, Columbia, South Carolina*, 5. *University of California, Berkeley, Berkeley, California*

Evidence suggests physical activity, heart-healthy diets, and social involvement may help maintain cognitive health. This focus group research examined diverse older adults' (50+, n=396) opinions on how to stay mentally sharp. We conducted thematic analysis of 42 focus groups, representing African Americans, American Indians, Chinese Americans, Latinos, non Hispanic whites, and Vietnamese Americans. All groups mentioned benefits of social involvement. Structured exercises (e.g., yoga) and leisure activities (e.g., gardening) were recommended. Chinese and Vietnamese participants suggested mental exer-

cises (e.g., puzzles), keeping a positive attitude, and the connection between physical and cognitive health. Chinese and American Indians recommended healthy diets. African Americans emphasized fruits and vegetables. Latinos stressed portion control. Participants' opinions reflect the growing science base on cognitive health promotion, but did not often include regular aerobic activity, which substantial evidence links with cognitive health. Cognitive health messages and interventions need to consider attitudes and beliefs of diverse populations.

'I JUST WANT TO BE SHARP ALL THE REST OF MY LIFE.' COGNITIVE CONCERNS IN AGING

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A greater understanding of concerns about cognitive health is useful for developing effective health communications. This focus group research examined diverse older adults' perceptions about cognitive concerns. We conducted thematic analysis of 42 focus groups (n=396, ages 50+), representing African Americans, American Indians, Chinese Americans, Latinos, non Hispanic whites, and Vietnamese Americans. Among other questions, we asked, "Tell us about any concerns you may have about your ability to keep your memory or ability to think as you age." The most prominent concerns in all groups except Latinos were forgetfulness (keys, names), memory loss, and Alzheimer's disease. Concerns about social isolation and loneliness were voiced more by American Indians and Vietnamese Americans. Groups expressed shared concerns about: social impact and family burdens, cognitive challenges of multi-tasking, fear and feeling helpless, effects of aging on social interactions. Findings suggest opportunities for public health messages to promote health behaviors that support cognitive health.

'THERE'S NORMAL DEMENTIA AS YOU GET OLDER, ISN'T THERE?' DESCRIPTIONS OF MEMORY LOSS

S.B. Laditka¹, J.N. Laditka¹, R. Liu², A.E. Mathews⁵, B. Wu³, D.B. Friedman², L.L. Bryant⁴, S. Corwin², 1. *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*, 2. *University of South Carolina, Columbia, South Carolina*, 3. *University of North Carolina at Greensboro, Greensboro, North Carolina*, 4. *University of Colorado, Denver, California*, 5. *Furman University, Greenville, South Carolina*

Understanding how older people describe memory loss and brain health can help develop effective health communications. We examined how people describe those with and without cognitive impairment, conducting thematic analysis of 42 focus groups (n=396, ages 50+) of African Americans, American Indians, Chinese Americans, Latinos, non Hispanic whites, and Vietnamese Americans. Among other questions, we asked: "What words do you use to describe older people who have a loss of memory or thinking ability?" "What words do you use to describe older people who do not have a loss of memory or thinking ability?" When describing people with memory loss, African Americans and whites most often used "Alzheimer's" and "senile." Most groups used "dementia," "senior moment," or "slow thinking," and said forgetfulness characterized memory loss. Older people without memory loss were described as "sharp," "alert," or "active." Findings suggest terms for use in public health messages to promote brain health.

“IS MY MIND ON OVERLOAD BECAUSE OF BEING A CAREGIVER?” COGNITIVE HEALTH AMONG DEMENTIA CAREGIVERS

S.B. Laditka¹, W. Tseng², A.E. Mathews⁶, B. Wu⁵, S.L. Ivey², D.B. Friedman³, R.L. Beard⁴, R. Liu³, 1. *Public Health Sciences, University of North Carolina at Charlotte, Charlotte, North Carolina*, 2. *University of California at Berkeley, Berkeley, California*, 3. *University of South Carolina, Columbia, South Carolina*, 4. *Holy Cross, Worcester, Massachusetts*, 5. *University of North Carolina at Greensboro, Greensboro, North Carolina*, 6. *Furman University, Greenville, South Carolina*

Providing care to people with dementia is stressful emotionally and physically. This focus group research examined perceptions about cognitive health among caregivers of people with dementia. We conducted thematic analysis of 10 focus groups, representing African Americans, Filipinos, and non Hispanic whites (n=81, mean age=59); most were providing care to a spouse or parent. Among other questions, participants were asked: Is there anything about being a caregiver that concerns you when it comes to the health of your own brain? Whites emphasized concerns due to policies and laws (e.g., power of attorney, social security), and other family members being in denial and not providing help. African Americans and whites described lack of support from physicians. Filipino caregivers stressed concerns related to safety of the care recipient, and the need for caregiver rest and to reduce caregiver stress. Public health messages need to include ways to promote cognitive health among caregivers.

SESSION 1245 (POSTER)

BS POSTER SESSION III - FACE-TO-FACE TIME: 2:30 PM – 4:00 PM

IS MORTALITY RATE INCREASED IN A FRAIL MOUSE MODEL?

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Background. Frailty in older adults is characterized by elevated serum IL-6, weakness, weight loss, and is predictive of mortality. The genetically altered IL-10tm/tm mice develop inflammation and early strength decline similar to frail humans. Therefore, we hypothesized that mortality is higher in IL-10tm/tm mice than C57BL/6J controls. Methods. Three months old age- and gender-matched IL-10tm/tm (25 males, 25 females) and C57BL/6J mice (25 males, 25 females) were longitudinally monitored for a total of 103 weeks. Incident mortality rate in each group was calculated as the number of mice that died over the total time in weeks at risk. Kaplan-Meier estimates of the survival function were calculated at times when death occurred. The log-rank test was used to compare survival curves in both groups of mice. Results. The first IL-10tm/tm mouse died at 43 weeks of age, compared to 61 weeks in C57BL/6J control. Twenty-seven IL-10tm/tm mice died by the conclusion of the study compared to 12 in C57BL/6J mice. The incident mortality rate ratio between the strains was 2.64 (95% CI: 1.29, 5.71). The Kaplan-Meier survival estimates demonstrated better overall survival in the C57BL/6J mice by log-rank test (p value < 0.001). Preliminary necropsy reports indicated that sinus and pulmonary infections were a leading cause of mortality. Conclusion. The IL-10tm/tm frail mouse has an earlier onset of death and higher mortality compared to C57BL/6J control strain, consistent with observations in frail older adults. Respiratory infections may be an important cause of this early mortality. Further biological characterization of this frail mouse model may help elucidate mechanisms of late life vulnerability.

DO STRUCTURAL MRI ANALYSES SHOW EVIDENCE FOR COGNITIVE RESERVE IN THE HEALTHY AGING BRAIN?

A.M. Peiffer, C.E. Hugenschmidt, J. Mozolic, P.J. Laurienti, *Radiology, Wake Forest University School of Medicine, Winston-Salem, North Carolina*

Number of years of education is an indicator of the cognitive reserve available as one ages. Increased education is also related to higher scores on several cognitive measures including the Digit-Symbol Substitution Task and Mini-Mental Status Exam. Behavior on these measures has been correlated to a variety of magnetic resonance imaging (MRI) structural measures, and in general, older adults also show several structural differences in their brain. In a recent study of 16 young (age: 18-39 years) and 16 older (age: 65-90 years) adults, young had greater fractional anisotropy than older adults throughout anterior white matter, which has been related to increased fluid intelligence and faster processing speed. Also, young had greater gray matter volume than older adults in several structures involved in the default mode network, a network known to deactivate more in younger than older adults during goal-directed behavior. Finally, young had greater perfusion than older adults in several structures including anterior and posterior cingulate and bilateral hippocampus. When perfusion results were correlated with years of education (age included as covariate), a weak positive correlation was evident in the left frontal cortex and right anterior cingulate. A follow up investigation is currently under way to assess the relationship between years of education and resting-state perfusion in a group of 140 healthy adults (young = 39 and old = 91).

DOES DIETARY INTAKE OF ANTIOXIDANTS CONTRIBUTE TO CHANGE IN MUSCLE STRENGTH AMONG OLDER PERSONS?

B. Bartali¹, S. Kritchevsky², A.B. Newman³, T. Harris⁴, M. Koster A. Cesari^{8,5}, D. Tykavsky F. Sellmeyer^{9,7}, N. Lee JS De Rekeneire^{6,1}, T. Allore H. Gill¹, 1. *Yale University, New Haven, Connecticut*, 2. *Wake Forest University School of Medicine, Winston-Salem, North Carolina*, 3. *University of Pittsburgh, Pittsburgh, Pennsylvania*, 4. *National Institute of Aging/NIH, Bethesda, Maryland*, 5. *Università Cattolica del Sacro Cuore, Roma, Italy*, 6. *University of Georgia, Athens, Georgia*, 7. *University of California San Francisco, San Francisco, California*, 8. *Universiteit Maastricht, Maastricht, Netherlands*, 9. *University of Tennessee Health Science Center, Memphis, Tennessee*

Introduction: The decline in muscle strength that occurs with aging represents a major risk factor for the development of frailty and disability in older persons. However, the preventive role of dietary antioxidants on age-related decline in muscle strength is unclear. The purpose of this study was to determine whether antioxidants intake is associated with change in muscle strength among community-living older persons. Methods and Materials: A food-frequency questionnaire was administered by trained interviewers to assess dietary intake of energy and nutrients, including the two main antioxidants vitamins C and E, in men and women aged 70-79 years enrolled in the Health, Aging, and Body Composition study. Grip strength was measured at baseline and the 2-year follow-up using an isometric dynamometer. The final analytical sample included 2105 persons. Results: The mean daily dietary intake of vitamins C and E was 144.8 (SD=76.7) mg and 11.04 (SD=6.8) mg, respectively. Using a general linear model adjusted for age, gender, race, body weight, physical activity and energy intake, we found a significant association between dietary intake of vitamins C (Beta=0.004, p=0.030) and E (Beta=0.059, p=0.007) at baseline and subsequent change in muscle strength (kg) over 2 years. Furthermore, the effect of these antioxidants on change in muscle strength did not depend on the initial level of muscle strength (Vitamins C/E*muscle strength at baseline; p>0.10). Conclusions: Dietary intakes of vitamins C and E are positively associated with muscle strength. These results suggest that dietary intake of antioxidants may play an important role in preserving muscle function in community-living older persons.

SMALLER CARDIOMYOCYTE SIZE AND REDUCED COLLAGEN CONFERS LONGEVITY BENEFIT IN THE HEARTS OF AMES DWARF MICE

S.A. Helms¹, G. Azhar^{2,1}, C. Zuo^{1,2}, S. Theus², A. Bartke³, J.Y. Wei^{1,2}, *1. University of Arkansas for Medical Sciences, Little Rock, Arkansas, 2. Central Arkansas Veterans Health Services and Geriatrics and Extended Care, GRECC, Little Rock, Arkansas, 3. Southern Illinois University, Springfield, Illinois*

Purpose: To test the hypothesis that cardiac morphologic differences between Ames dwarf and wild-type littermates might correlate with the increased longevity in the Ames dwarf mice. **Methods:** Hearts from young adult (5-7 mo) and old (24-28 mo) Ames dwarf and wild-type littermates underwent histological and morphometric analysis. Measurements of cell size, nuclear size, and collagen content were made using computerized color deconvolution and particle analysis methodology. **Results:** In the young age group, mean cardiomyocyte area was 46% less in Ames dwarf than in wild-type mice ($p < 0.0001$). Cardiomyocyte size increased with age by about 52% in the wild-type mice and 44% in the Ames dwarf mice ($p < 0.001$). There was an age-associated increase in the cardiomyocyte nuclear size by approximately 50% in both the Ames and wild-type mice ($p < 0.001$). The older Ames dwarf mice had slightly larger cardiomyocyte nuclei compared to wild-type (2%, $p < 0.05$). The collagen content of the hearts in young adult Ames dwarf mice was estimated to be 57% less compared to wild-type littermates ($p < 0.05$) but there was no significant difference at 24 months. **Conclusions:** In wild-type and Ames dwarf mice, nuclear size, cardiomyocyte size, and collagen content increased with advancing age. While cardiomyocyte size was much reduced in young and old Ames dwarf mice compared with wild-type, collagen content was reduced only in the young adult mice. These findings suggest that Ames dwarf mice may receive some longevity benefit from the reduced cardiomyocyte cell size and a period of reduced collagen content in the heart during adulthood.

(G/A) TNF-ALPHA GENE POLYMORPHISM AND RISK OF DEPRESSION LATE IN THE LIFE

G. Annoni¹, A. Cerri¹, B. Arosio², C. Viazoli², R. Confalonieri¹, F. Teruzzi¹, C. Vergani², *1. Internal Medicine, Università Milano-Bicocca, Monza, Italy, 2. Department of Internal Medicine, U.O. Geriatrics, Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena, Fondazione IRCCS, Milan, Milano, Milano, Italy*

Background: major depression (MD) has been indicated as a promoting factor for Alzheimer's Disease (AD). Inflammation plays a key role in the mechanisms underlying both these pathologies. In particular, single nucleotide polymorphisms (SNPs) in cytokines genes, that are responsible for protein levels, have been associated with neurodegeneration and its clinical evolution. In our experience, SNPs in IL-10(-1082 G/A), IL-6(-174 G/C) and TGF-beta1(+10 T/C) genes were considered risk factors for AD; while A allele carriers of -308 G/A SNP in TNF-alpha gene showed an earlier age at onset than non-carriers. The aim of this study was to investigate possible association between late-onset MD and cytokine genes, to confirm if their genetic variants are involved in the disease. **Methods:** 50 subjects (age range 65-85) were recruited, after screening with Geriatric Depression Scale (GDS ≥ 15) and Mini-Mental State Evaluation (MMSE ≥ 24). The -1082(G/A) IL-10, -174(G/C) IL-6, +10(T/C) TGF-beta1, -308(G/A) TNF-alpha, +874(T/A) IFN-gamma SNPs were genotyped by SSP-PCR amplification. Control subjects were age-matched healthy volunteers, free from psychiatric illness or dementia. **Result:** We identified different genotype and allele distributions only for -308(G/A) TNF-alpha SNP, evidencing a higher percentage of GG genotype in depressed subjects (84% vs 68,3%; $p = 0.007$) and consequently of the G allele (92% vs 81,9%; $p = 0.05$). GG genotype raised the risk of developing MD (O.R. 2.433, C.I. 1.09-5.43). **Conclusion:** The investigated cytokine SNPs may have a different impact on neurodegeneration and MD. However, TNF-alpha

gene polymorphism may: 1) affect MD susceptibility; 2) be involved with a distinct role both in AD and MD development.

NOT ALL GENES WITH CLASSIC CARG ELEMENTS ARE DIFFERENTIALLY REGULATED BY SRF IN MOUSE HEARTS

X. Zhang¹, S.A. Helms¹, G. Azhar^{1,2}, J.Y. Wei^{1,2}, *1. Donald W Reynolds Department of Geriatrics, University of Arkansas for Medical Sciences, Little Rock, Arkansas, 2. Central Arkansas Veterans Healthcare System, Little Rock, Arkansas*

Objective: The transcription factor serum response factor (SRF) regulates cardiac genes during development, maturation and aging. The age-related increase of SRF expression in senescence has been implicated in the altered gene expression in rodent hearts. Since SRF target genes are regulated by SRF, in addition to other transcription factors, we hypothesized that all SRF binding genes must have a significant role in the heart. **Methods:** We utilized affymetrix microarray to analyze the gene expression in a transgenic cardiac-specific mouse model which over-expresses wild-type SRF, in which the young adult heart resembles that of the typically aged heart. **Results:** We identified 207 cardiac genes that were differentially expressed in response to SRF regulation in vivo. We also analyzed 30 genes that were least affected by SRF overexpression. The promoter region (10,000 base pairs) of those genes was searched using bioinformatic software for the presence of multiple transcription factors binding sites that include cardiac muscle-related factors, SRF, GATA-4, Nkx2-5, MEF-2 and MyoD; forkhead transcription factors, TCF-1, NF-kappaB and YY1. We found that the classic SRF binding site (CARG element) was also found in 10 genes least affected by SRF over-expression. However, these 10 genes have not been reported to be important in cardiac physiology. **Conclusions:** The extent to which SRF target genes are regulated by SRF is dependent upon the physiological and pathological stress and tissue type. Hence, over-expression of SRF in the heart, might not impact all CARG containing genes which might not have significant relevance to cardiac structure and function.

NEGATIVE SIGNALING CONTRIBUTES TO THE ALTERED T CELL FUNCTIONS WITH AGING

T. Fulop, C. Fortin, *Research Center on Aging, Sherbrooke, Quebec, Canada*

Introduction: Aging is accompanied by a decrease in immune functions, called immunosenescence. The exact cause is still not known. Changes in T cell sub-populations, thymic involution were invoked. We have demonstrated that the signal transduction is altered with aging. In the present work we studied the negative regulatory molecules in the T cell signaling to explain the altered activation of T cells with aging leading to decreased clonal expansion. **Methods:** 25 healthy young and elderly subjects were studied. Lymphocytes were separated by Ficol-Hypaque. The molecules participating in the negative control loop of Lck were studied by Western blot and confocal microscopy. The surface expression of CTLA-4 has been studied by FACScan. The translocation of the molecules in the membrane lipid rafts (MLR) was also studied by Western blot. **Results:** We found that the phosphorylation of PAG was altered with aging explaining the decreased release of Csk from MLR and the decreased Lck activation. The activation of FynT was also altered. The phosphatase activity studies showed an increase in their activities with aging. The CTLA-4 expression was higher after stimulation in T cells of elderly. **Conclusion:** These results suggest that the negative regulation is preponderant in T cells with aging on the positive activation and as such explaining the defect in T cell functions with aging. This opens new therapeutic avenues in the future.

NEUROPROTECTION THROUGH INTERACTIONS BETWEEN MICROGLIA AND PROSTAGLANDIN RECEPTORS

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There is an urgent need for therapies that promote neuronal survival for age-related neurodegenerative diseases. A promising area for potential new neuroprotective therapies may be directed at modulating components of inflammation in the brain that contribute to the injury of neurons. We have found that a resident inflammatory cell type in the brain, microglia, may protect neurons by changing how neurons respond to other inflammatory molecules called prostanoids. Prostanoids are made by the enzyme cyclooxygenase 2 (COX-2) and inhibitors of COX-2 can protect neurons. However, therapies utilizing COX-2 inhibitors are problematic because of cardiovascular complications associated with their use. As such, recent efforts have begun to identify targets down stream of COX-2 such as the prostanoid receptors. One such target is the EP1 receptor that binds to prostaglandin E2 (PGE2) and contributes to neuronal death. We have used a neuronal culture system to demonstrate that microglia can change how neuronal EP1 receptors contribute to neuronal death. We have also observed that microglia induce changes in distribution of EP1 expression in neurons that may contribute to neuronal viability. We hypothesize that microglia mediate neuroprotective effects through modulation of the EP1 prostaglandin receptor.

SESSION 1250 (SYMPOSIUM)

NUTRITION INTERVENTION, AGING AND CANCER

Chair: A.R. Heydari, Nutrition, Wayne State University, Detroit, Michigan

Over 70 years ago, McCay and his colleagues demonstrated that a reduction in food intake significantly increased both mean and maximum life span of laboratory rodents demonstrating the impact of food on phenotypes of aging and cancer. Recent studies demonstrate that alterations in components of food independent from caloric restriction could impact ageing and cancer. It has been proposed that alterations in the balance of stress response genes are the key factors in the effectiveness of functional food. For example, life-long methionine restriction in rodents has been shown to increase life span and inhibit age-related disease processes, while impacting oxidative stress. These findings, while controversial, have raised great excitement among researchers. Currently, "there are great opportunities for the expanded use of functional foods to achieve genetic potential and reduce the risk of disease; the real challenge is to identify the population who will benefit the most and identifying those who may be placed at risk with dietary intervention". In other words, there are genetic and environmental differences which precipitate into conditions impacting aging and disease. In this session, Dr. John Richie would discuss the impact of methionine restriction on aging and cancer; and Drs. Diane Cabelof and Eva Schmelz would present their findings on impact of folate and sphingolipids on aging and cancer. Dr. John Milner would conclude this session by presenting a seminar discussing challenges with regard to translational approach of the recent discoveries and identifying population in need.

SPONTANEOUS GENOMIC INSTABILITY IN THE AGING COLON: DNA REPAIR AND FOLATE

D. Cabelof, Wayne State University, Detroit, Michigan

Aging is a strong risk factor for development of colorectal cancer (CRC), with over 90% of diagnoses occurring in individuals over the age of 50. By an unknown mechanism, the aging colon becomes folate

depleted, and this does not appear to be a function of diet. Whether loss of colonic folates with age explains the age-related increase in CRC is an open question. Because chromosomal instability and copy number changes occur in sporadic CRC and in response to folate depletion, we have evaluated the impact of aging on spontaneous copy number variation in mouse colon. We find highly significant copy number changes in old colon as compared to young colon with near total overlap of regions between animals, suggesting a non-random mechanism of genomic instability. Copy number changes are one of the most frequent genomic aberrations seen in solid tumors, and to my knowledge this is the first observation that normal aging exhibits this phenotype. We are investigating the roles that DNA repair and p53 function may play in this process. Further, because folate depletion results in uracil accumulation in DNA we are investigating repair of uracil in the aging colon. We have found that uracil excision is strongly upregulated in the aging colon, and suggest that uracil is a critical initiator of genomic instability in the aging colon. Uracil excision is known to generate DNA double strand breaks, and we propose that poor resolution of uracil-derived double strand breaks in the face of p53 dysfunction facilitates copy number change.

REGULATION OF GENE EXPRESSION BY BIOACTIVE SPHINGOLIPID METABOLITES IN A MOUSE CELL MODEL FOR PROGRESSIVE OVARIAN CANCER

E.M. Schmelz, P.C. Roberts, Virginia Tech, Blacksburg, Virginia

Ovarian cancer is the most deadly gynecological malignancy with a survival rate of only 47%. It is mostly a disease of aging women and despite tremendous efforts to prevent or cure ovarian cancer, its incidence and high mortality has remained largely unchanged. There are no proven methods of early prevention, and chemotherapeutic agents often are highly cytotoxic and can cause severe side effects. We have generated novel mouse ovarian surface epithelial (MOSE) cell lines that mimic early stages of ovarian cancer that progress to intermediate and late stages upon continual passage in cell culture. Aberrant gene expression—identified by Affimetrix cDNA arrays—accompany the progression of these cells. Many of these genes affect the cytoskeleton, adhesion, metabolism and survival. The treatment of MOSE cells with non-toxic concentrations of sphingolipid metabolites can in many cases prevent or reverse the aberrant expression of these genes. This may be crucial for the suppression of MOSE tumor growth in vivo in immunocompetent mice, and for the development of a strategy using orally administered sphingolipids in the prevention and possibly treatment of ovarian cancer.

METHIONINE RESTRICTION AGING AND CANCER

J.P. Richie, Public Health Sciences, Penn State University College of Medicine, Hershey, Pennsylvania

Methionine restriction (MR), the feeding of a diet low in methionine, was found to extend mean and maximum life span by 40-50% in F344 rats. While MR is associated with decreases in body weight, pair-feeding and metabolic studies have indicated that the beneficial effects of MR are not due to a restriction in caloric intake. More recent studies have indicated that MR was also effective at increasing longevity in mice and drosophila, and at delaying or inhibiting a number of aging-related diseases and pathologies including cancer. Also, in the rat, MR dramatically reduced azoxymethane-induced colon carcinogenesis. Both in vitro and in vivo studies have indicated that the anti-aging properties of MR may be mediated, in part, by reductions in oxidative stress driven by decreased production of reactive oxygen species (ROS). Overall, these data indicate MR as an important new tool for anti-aging research with potential clinical implications.

OPPORTUNITIES AND CHALLENGES IN NUTRIGENOMICS, CANCER PREVENTION AND AGING

J.A. Milner, *Nutritional Science Research Group, National Cancer Institute, Rockville, Maryland*

Inappropriate dietary habits are implicated in the major causes of death of individuals living throughout the world. Chronic diseases, including heart disease and cancer, are intimately linked to aging, weight and the foods that are consumed. This presentation will focus on the use of nutrigenomics which includes nutrigenetics (genetic profiles that modulate the response to food components), nutritional epigenetics (influence of food components on DNA methylation and other epigenetic events and visa versa) and nutritional transcriptomics (influence of food components on gene expression profiles) and associated changes in proteomics and metabolomics for developing predictive models for evaluating the benefits and risk associated with dietary change. While many uncertainties exist about the precise role of diet in health, the use of “omic” technologies holds great promise in determining who will benefit most and who will be placed at risk from dietary change and the most appropriate timing for intervention.

SESSION 1255 (SYMPOSIUM)

CAREGIVING IN CONTEXT: INDIVIDUAL AND RELATIONAL DIFFERENCES IN THE CAREGIVER EXPERIENCE

Chair: C.W. Sherman, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Providing care for an aging relative is an increasingly common, even inevitable, experience for spouses and adult children. While family caregiving has been recognized as a significant stressor on family members, contributing to increased isolation, depression, physical and emotional difficulties and even morbidity, we are increasingly sensitive to the fact that the experience and effects of providing care for a family member vary by individual (e.g., gender) and contextual factors (relationship type and quality). In this symposium, we bring together four papers which highlight new insights into the family caregiving experience. Sorensen and Pinquart present findings from their large-scale meta-analysis of caregiving literature to describe key differential effects of caregiving on spouse and adult children's well-being. Next, Haley, Roth, Wadley, Clay and Howard examine how caregiving strain differentially contributes to increased spouse caregiver risk of stroke by gender and race. Third, Blieszner and Roberto focus on interview data to reveal the effects of gender on coping with the early stages of care by family members for a relative with mild cognitive impairment. Last, Sherman examines positive and negative social support networks and care experiences among late-life remarried wives who are caregiving for husbands with Alzheimer's disease. Finally, symposium discussant, Calasanti, explores the ways in which the findings presented shed light on how gender, role history and identity shape the caregiving experience, and how awareness of contextual factors can contribute to tailoring future caregiver interventions.

THE ROLE OF GENDER IN COPING WITH MILD COGNITIVE IMPAIRMENT

R. Blieszner, K.A. Roberto, *Human Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia*

Gender shapes life experiences and influences responses to significant life challenges. We assessed the effects of gender on the pre-caregiving “care partner” stage of assisting a relative with mild cognitive impairment (MCI) using interview data from 17 male and 17 female care partners from a larger sample (matched on key demographic characteristics including relationship status and living arrangements). Examples of the coding categories analyzed were care partner's role and role changes, coping, interaction dynamics, household responsibilities, inti-

macy, managing MCI, and social support. Results are presented in terms of gender similarities and differences on eight themes that emerged from the analysis: effects of care partner role on personal identity, willingness to solicit help, emotion regulation, external engagement, coping with worry, and relationship history. The findings reveal the complexity of responses to MCI and of strategies for managing MCI, and point to interventions that could assist care partners.

COMPLEX CARING: DEMENTIA SPOUSE CAREGIVING IN THE CONTEXT OF REMARRIAGE

C.W. Sherman, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Families are increasingly heterogeneous, as reconstituted structures are more common across the life span. While such trends influence aging issues, such as family caregiving, most caregiver research has not accounted for Americans' more complex marital and family histories. Findings from a study of 50 late-life remarried Alzheimer's wife caregivers are presented. Examination of structure and quality of social relations and positive and negative support networks suggest traditional sources of support (close family members) provide minimal assistance in caregiving duties and responsibilities to these caregivers, while adult stepchildren play a preponderant role in negative support networks. Remarried wife status and gender may contribute to reported lack of support. Salient qualitative themes reveal that for many remarried caregivers, stepfamily structures are associated with a lack of involvement, trust and increased suspicion concerning the motivations of the spousal caregiver. Potential avenues for targeted interventions for this potentially vulnerable population of caregivers are discussed.

CAREGIVING STRAIN AND ESTIMATED RISK FOR STROKE AND CORONARY HEART DISEASE AMONG SPOUSE CAREGIVERS: DIFFERENTIAL EFFECTS BY RACE AND GENDER

W.E. Haley¹, D. Roth², G. Howard², M. Safford², *1. School of Aging Studies, University of South Florida, Tampa, Florida, 2. University of Alabama at Birmingham, Birmingham, Alabama*

Participants in the REasons for Geographic and Racial Differences in Stroke (REGARDS) study who were providing in-home caregiving assistance to a disabled spouse reported on caregiving strain, depressive symptoms, social support, education, and age, and were evaluated on the Framingham Stroke Risk (N=716) and Framingham CHD Risk (N=607) scales of estimated 10-year disease risk. Caregiving strain was associated with a 23% higher covariate-adjusted estimated stroke risk (11.06% for caregivers with no strain versus 13.62% risk for high strain caregivers). This association was stronger in men, particularly African American men. African American men with high caregiving strain had a 26.95% estimated 10 year stroke risk. Caregiving strain was not associated with CHD risk scores. Caregiving strain is significantly associated with higher estimated stroke risk, with greatest effects for men, particularly African American men, providing highly stressful caregiving to their wives.

THE EFFECTS OF CAREGIVING ON SPOUSES AND ADULT CHILDREN: A META-ANALYTIC COMPARISON

S. Sorensen¹, M. Pinquart², *1. Psychiatry, University of Rochester School of Medicine and Dentistry, Rochester, New York, 2. University of Marburg -Psychology, Marburg, Germany*

The number of family, friends and neighbors providing care to persons 65+ who need assistance with everyday activities has reached 6 - 7 million. A quarter of caregivers are spouses while the rest are adult children, grandchildren, other relatives, or friends. Spouses account for about 62% of primary caregivers, but only 16% of secondary caregivers. First, we will review the ways in which caregiving is a chronic stressor that places caregivers at risk for physical and emotional problems. Then we will report findings from a meta-analysis of 141 studies

published between 1983 and 2009, comparing spouses and non-spouses. Spousal caregivers are significantly more likely to report depression symptoms, and less likely to report uplifts of caregiving. They report less social support, lower income, less employment, more hours of caregiving, but fewer CR behavior problems. Additional analyses will evaluate the relation of external stressors to levels of distress among caregiving spouses.

SESSION 1260 (POSTER)

CROSS NATIONAL

PREDICTORS AND CONSEQUENCE OF HEALTH BEHAVIORS: TESTING THE ANDERSEN MODEL USING KLOSA

S.K. Kahng, K. Boo, *Department of Social Welfare, Seoul National University, Seoul, Korea, South*

In the year of 2006, the Korean government launched “Korean Longitudinal Study on Aging (KLOSA),” which is similar to the Health and Retirement Study and is the first nationally representative data on Korean elderly. Due to the lack of data, little is known about the characteristics of Korean elderly and much less is known about their health status and behaviors. Following the propositions of the Andersen Model (Andersen, 1995), this study examines the predictors and consequences of health behaviors using Structural Equation Modeling (SEM). Pre-disposing predictors include age, gender, and education. Enabling predictors include income, informal social networks, and formal social networks. Need predictors include chronic health conditions and pains. Health behaviors include days in a hospital, numbers of doctor visits, and exercise. Consequence variable is depression. Samples consist of 10,254 adults age 45 and over who participated in the first wave of KLOSA. All fit index indicate that the model fits the data well. Results indicate that (1) outpatient medical service uses are correlated with age(+) and chronic health conditions(+); (2) inpatient service uses are correlated with male gender(+), informal social networks(-), and pains(+); (3) exercise is correlated with age(+), education(+), income(+), informal social networks(+), formal social networks(+), chronic health conditions(+), and pains(-); (4) all three health behavior variables were significantly associated with depression – inpatient service use(+), outpatient service use(+), exercise(-). In addition to introducing KLOSA, the meaning of findings, the findings of mediational paths, and implications for future research and practice will be discussed.

LONG-TERM CARE AND SOUTH ASIAN ELDERLY AMERICANS

I. Amin, S.S. Jesmin, *University of Louisiana at Monroe, Louisiana, Louisiana*

As the minority population is aging in the United States, ethnically-specialized long-term care facilities and care giving have become an increasing focus of research. Compared to other ethnic groups, little is known about how the South Asian American families (Bangladeshis, Pakistanis, and Indians) are dealing with the challenge of providing long-term care for their elderly. Although filial piety is a strong value in Asian culture, for many second generation or third generation Asian Americans it is quite a challenge to provide informal care to their parents when they are dual earner couples and acculturated to the mainstream culture. The objectives of this study were to understand: for South Asian Americans what is the need for long-term care? Where do they receive long-term care and from whom? What role does the family and informal caregivers play? How much are they dependent on home and community-based care or nursing home care? What is their attitude toward formal long-term care? And finally who pays for it? Data were collected from 200 South Asian families. The sample was selected through purposive sampling technique. Descriptive statistics and multivariate regression analysis were conducted to analyze the results. Addi-

tionally, 10 case studies were done to explore the major long-term care issues for this community. This study demonstrates a growing need for ethnically-specific and culturally sensitive long-term care facilities for the South Asian elderly.

RISK ASSESSMENT: CULTURAL PRACTICES IN PACIFIC ISLANDER, AFRICAN AMERICAN AND ASIAN AND HEALTHY AGING

M.E. Davis, H.F. Vakalahi, E.S. Ihara, *Social Work, George Mason University, Fairfax, Virginia*

A comparative analysis of cultural practices and beliefs, of Pacific Islanders, African Americans and Asians using a risk assessment model to evaluate cultural practices that may serve as risk or protective factors. Implications for healthy aging and positive health outcomes will be explored. Cultural practices, and beliefs are integral components of high quality health care. (Kilbourne, et al. 2006). They impact patient preferences, health beliefs and interventions. This paper features a comparative analysis of cultural practices that impact health care in African Americans, Pacific Islanders and Asians. What is unique is these cultural practices are viewed from a risk assessment perspective. Cultural practices have their basis in helping groups adapt to their environment. When population groups move outside their country of origin, many cultural practices, traditions and values can become maladaptive. These same cultural practices can become risk factors, if they pose an obstacle to receiving health care or block compliance with treatment to improve health outcomes. Elderly African Americans, Asians and Pacific Islanders along with those of other ethnic groups tend to have a stronger adherence to cultural practices. They play an integral role in intergenerationally transmitting these practices to the young. If however these beliefs, traditions, values and behaviors are in effect risk factors associated with poor health outcomes, efforts should be targeted toward moderating harmful cultural practices and promoting those that serve as protective factors. This paper explores criteria to identify cultural practices, beliefs and values that are associated with increased risk for negative health outcomes. These criteria can also identify cultural practices that can potentially protect against negative health outcomes. Examining cultural practices from a risk assessment perspective provides insights for intervention and healthy aging and the identification of practices that may be more transient and amenable to change

WHITE BLOOD CELL COUNT, SELF-RATED HEALTH, AND PHYSICAL PERFORMANCE AMONG OLDER JAPANESE

J. Liang¹, L. Nyquist², J.M. Bennett¹, A.E. Aiello¹, S. Shinkai³, Y. Fujiwara³, Y. Yoshida³, *1. Health Management & Policy, University of Michigan, Ann Arbor, Michigan, 2. Institute of Gerontology University of Michigan, Ann Arbor, Michigan, 3. Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

There are few studies which integrate bio-measures with psychosocial variables in predicting how physical functioning evolves over time. This research examines the trajectories of physical performance among older Japanese with a focus on their linkages with white blood cell count (WBC) and self-rated health (SRH). Data came from the annual health examinations from 2002 to 2006 in Kusatsu in eastern Japan. The participants included 1,048 Japanese aged 60 or over with 2,405 observations. The dependent variables were measured by tests of hand grip strength, length of time standing on one leg, and usual and maximum walking speed. Nonfasting blood samples were collected from which WBC was obtained. SRH was indexed by a rating of health as excellent, good, fair, and poor. Hierarchical linear models with time-varying covariates were applied to examine changes in physical functioning over a period of up to 5 years. Linear as well as nonlinear trajectories were evaluated. Grip strength, one-leg stand, and walking speed all showed slight but significant linear decline over time. Women exhibited a lower level of functioning and a greater rate of decline. With age, gender, education, height, weight, and attrition adjusted, higher WBC was nega-

tively associated with walking speed (WBC 4th quartile, $b=-.035$, $p<.05$) and one-leg stand (WBC 4th quartile, $b=-3.110$, $p<.01$). In contrast, self-rated poor health was significantly associated with poorer grip strength ($b=-.447$, $p<.05$), one-leg stand ($b=-2.686$, $p<.001$), and usual walking speed ($b=-.045$, $p<.001$). In summary, trajectories of physical performance are significantly correlated with WBC and SRH.

DISPARITIES IN MENTAL HEALTH SERVICE USE AMONG ETHNIC MINORITY ADULTS

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The Institute of Medicine disparities definition, that disparities are all differences except those due to clinical need and preferences, is implemented to identify patterns of mental health service use in a multi-racial/ethnic older adult (age 50+) sample. We hypothesize that mental health service disparities exist between older non-Latino whites and older Latinos, Asians, African-Americans, and Afro-Caribbean. Pooled data from the Collaborative Psychiatric Epidemiological Studies, the most current and comprehensive national data source, is used. The World Health Organization Composite International Diagnostic Interview was used to identify the presence of lifetime and 12-month psychiatric disorders. Access to mental health treatment is defined as at least one visit in the past year to a specialty mental health or general medical provider for mental health or substance abuse issues. Results indicate considerable disparities in mental health care services between older Asians and older non-Latino Whites, even after adjustment for ethnicity, age (50-64), chronic conditions (2+), and income (\$15,000 - \$34,999). No service disparities were observed between African-Americans and Latinos, in contrast to Whites. Consistent with previous research (Miltiades and Wu, 2008), older Asians may disdain Western medicine and may resort to traditional Asian medicine to deal with their depression. Alternatively, Asian elders might be less likely to recognize their mental illness which might exacerbate disparities in care. The information gathered in this study may be used to develop programs to increase access to mental health services for Asian elders.

AGING IN GUATEMALA: AN ETHNOGRAPHY OF A LONG-TERM CARE FACILITY

M.A. Perkinson, Saint Louis University, St. Louis, Missouri

Guatemala's relatively young population (median age=19 years) is expected to undergo a sharp fall in fertility rate (from 5.2 in 1995 to 2.4 in 2025) and increase in life expectancy (from 65 years in 1995 to 75 years in 2025), putting it on track for an accelerated demographic and epidemiological transition similar to that of other developing countries (U.S. Census Bureau, International Data Base, 2008). Aging represents "one of the biggest challenges that Latin American and Caribbean societies face during the 21st century" (PAHO 2007). Guatemala currently directs its limited public health resources toward infants, children, and mothers. However, needs of Guatemalan aged are becoming more visible, reflected in growing numbers of "abandoned elders" in its few available residential care facilities. An ethnographic study of one long-term care facility in Antigua, Guatemala, based on participant observation, interviews, and life histories, describes decisions that led to placement and provides accounts of everyday life among its residents.

AN EXPLORATIVE STUDY IN PROMOTING THE QUALITY OF RETIREMENT LIFE OF THE COHORT BORN IN THE 1950S IN URBAN CHINA

J. Liang, Sociology and Gerontology, Miami University, Oxford, Ohio

China is now one of the most rapidly aging countries in the world. With an increasing number of post-retirement years expected, identifying ways to improve the quality of retirement life is an important issue. However, little research has been done on this topic. The first Chinese "baby-boomers" who were born in the 1950s are the parents of the first

only-child generation. This cohort is relatively healthy and well-off, and therefore has great potential to live a satisfying and meaningful post-retirement life. This study seeks to examine the challenges and practical needs associated with retirement among this cohort. 10 semi-structured, in-depth interviews were conducted in Xi'an City, Shannxi Province, China. Three major themes emerged from the data. Both current and prospective retirees expressed some shared concerns, although there are differences based on current family structure (empty nest vs. collocation). First, loneliness due to the shrinking social network after retirement was a problem. This situation was worsened for empty-nest families. Second, the feeling of meaninglessness directly related to the loss of work roles was commonly indicated. Desires for staying active through participation in some kind of informal work (part-time reemployment, volunteering) and maintaining personal growth in later life through life-long education were expressed. Third, parents living with their children were facing a monotonous time-use pattern (helping children with housework and taking caring of grandchildren). More senior centers and organized community activities for increasing the opportunities of individual leisure and social engagement were identified as urgent needs.

HEALTH AND AGING IN A CHINESE POPULATION: URBAN AND RURAL DISPARITIES

I.E. Chang¹, M. Simon², X. Dong¹, 1. Rush University, Chicago, Illinois, 2. Northwestern Medical Center, Chicago, Illinois

Background: China is the most populous country in the world, with over 900 million people currently living in rural settings. With the rapidly aging Chinese population, there are still vast gaps in our knowledge about health and aging in rural Chinese population. The objective of this study is to compare the rural and urban differences in sociodemographic characteristics, health conditions and psychosocial factors associated with aging in a Chinese population. Methods: Cross-sectional descriptive study of 135 rural and 269 urban subjects aged 60 years or greater was performed in a community-dwelling Chinese population. Variables collected included sociodemographic, medical comorbidities, health-related quality of life and psychosocial measures of depressive symptomatology, loneliness and social support. Findings: Rural subjects, compared with urban subjects, were significantly younger (70.4 ± 6.9 vs. 68.4 ± 6.3 ($T=2.76$, $df 402$, $p=0.006$)), more likely to be women (27.5% vs. 48.9% ($\chi^2[2]=18.14$; $df 1$, $p<0.001$)), and have lower education and income ($p<0.001$). Rural subjects also reported significant lower overall health status, lower quality of life, and worse change in recent health. In addition, rural subjects compared with urban subjects, had significant higher proportion of depressive symptomatology ($p<0.001$), feelings of loneliness ($p<0.001$) and lower levels of social support measures ($p<0.001$). Conclusion: In this older Chinese population, rural subjects had significant poorer characteristics of health and wellbeing. These differences in characteristics were found across sociodemographic, health-related quality of life and psychosocial measures. Future studies are needed to explore in-depth the social context of these findings. 3

COMMUNITY BASED APPROACH TO CARING FOR ELDERLY EMPTY-NESTERS IN CHINA

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The fast growing Chinese economy and changing views have brought many changes to people's lives, particularly family structure. For example, young people in rural areas migrate to cities for work, setting up nuclear families, whereas those in urban areas move into their own apartments after marriage, establishing nuclear families as well. As a result, the number of elderly empty-nesters has skyrocketed. One estimate puts it as high as 40% of all the elderly population. Clearly, this phenomenon is a far cry from the longstanding Chinese tradition of "Three Generations under One Roof" family structure. It has also created tremen-

dous challenges for families, community and society to explore effective ways to best serve these elderly people. This poster will report our systematic analyses of several types of community based programs in China. Our conclusion is that an effective and successful program needs to have most of the following components: 1) is initiated by the local government at the township level for rural areas and district level for urban areas; 2) recruits volunteers as caregivers from the same or nearby community; 3) sets up "pair systems" so the volunteers and the elderly people become bonded over the time; 4) provides physical care/help as well as companionship; and 5) actively seeks feedback from volunteers and the elderly people to improve the program.

EFFECTS OF CULTURE, AGE, AND PERCEIVED EXCHANGE OF SOCIAL SUPPORT RESOURCES ON SELF-ESTEEM

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This research examines how cultural orientation, age, and the perceived exchange of social support resources may moderate self-esteem in young, mid-life and older adults. As noted by Kim (1995) and others (e.g., Markus & Kitayama, 1991), acculturation processes lead to the development of a self in an individualistic culture that is discrete, independent, and abstract, whereas in a collectivist culture the self is embedded, ensembled, and situated within the social group. To investigate the influences of culture, age, and perceived exchange of social support resources on self-esteem, a survey was administered to 128 individuals in the United States ranging in age from 19 to 70 years, and 153 individuals in Japan ranging in age from 18 to 68 years. The survey included measures of self-esteem and the exchange of social support resources in the interpersonal contexts of significant other, family, friends, and co-workers. Results indicated lower self-esteem scores in the Japanese sample. Further, intra-cultural MRC analyses predicting self-esteem score revealed a significant contribution of the Age by Perceived Exchange of Social Support Interaction set in the Japanese sample, Change-in-R square = .06, $p < .05$. Within this variable set, the Age by Perceived Exchange with Friends Interaction was found to be the primary contributor, Beta = .34, $p < .008$. Similar MRC effects were not observed in the US sample. Overall, these findings suggest cultural variation in effects of age and perceived exchange of social support resources on self-esteem of adults in the United States and Japan.

THE GENDER GAP IN DEPRESSION AMONG ELDERS IN THE UNITED STATES AND JAPAN: SOCIAL SUPPORT AS A MEDIATOR OR CAUSE?

A. Tiedt, *Sociology, Fordham University, Bronx, New York*

The literature on aging and depression describes a consistent gap in depression between elderly men and women, with women reporting higher levels of depression overall. While complications with physical health resulting from female longevity have a direct correlation with mental well being, the role of social support as a mediating variable is ambiguous. This research examines the role of informal social support and its inverse state, isolation, in protecting or exacerbating depression among elderly men and women. Data was used from the Health and Retirement Study and the Nihon University Longitudinal Study of Aging. The cross-national context of this study lends insight into the relationship between cultural norms regarding gender, family support and elder health.

QUALITY OF LIFE IN URBAN NEPALI WOMEN - DOES CONTEXT MATTER?

S. Shrestha, S.H. Zarit, *Pennsylvania State University, University Park, Pennsylvania*

Social norms in Nepal prescribe that elders in families are cared for by younger family members. However, in recent years, a different social structure, old age home (OAH), has emerged in urban areas to accom-

modate the segment of the old population that does not receive care in the family. The establishment of OAH that provides shelter, food and support, which traditionally were functions relegated to family indicates a change in the social contract in caring for the elderly. The proposed study will compare quality of life of women living in Birdhaashram (OAH) (N=20) and women living with their families (N=21). The two groups were found to be significantly different in age, social support and activities of daily living (ADL), such that women living in OAH were older and had more difficulty with ADL than those living with families. Women who lived with their families reported higher levels of social support. Univariate analysis was used to examine the relation between the two groups (DV) and levels of quality of life (IV) reported. Age, social support, subjective health and ADL were used as covariates. The results show that quality of life of women who lived in OAH was significantly different compared to those who lived with their families with women in OAH reporting lower levels of quality of life after controlling for age, social support, subjective health and ADL.

SIMILARITIES AND DIFFERENCES IN DEPRESSIVE SYMPTOMS AMONG OLDER ADULTS IN THE UNITED STATES AND EUROPE

B. Peyrot, M. Turner, *University of Arkansas, Fayetteville, Arkansas*

The relative percentage of the population over the age of 65 years in the United States and Europe is projected to be 21% and 30% respectively by 2050. Mediating factors related to their long-term well-being, i.e., depression and health, is of increasing concern. Using the European Study of Health and Retirement in Europe (SHARE) and the Health & Retirement Study in the United States (HRS; N=8,869), this study examines factors related to depressive symptoms among older adults on both continents. The SHARE data were divided into three regions: Central Europe (N=3,124), North Europe (N=2,792), and South Europe (N=2,774) (Prince, et al., 1999). Because of cultural and social differences, it is likely that different factors predict depressive symptoms within these nations. The study examined similarities and differences among demographic, social, and health factors relative to self-reported depressive symptoms. Although many similarities were observed, some noteworthy differences were found. Being female and/or widowed were consistent predictors of increased depressive symptoms. Income and assets were only significant to those from the United States. Being unmarried was related to increased depressive symptoms only in the United States and South Europe. Further, the amount of variance accounted for varied widely from 36% in South Europe to 13% in the United States. Participants in this presentation will gain increased knowledge about factors related to self-reported depressive symptoms in the United States and Europe.

CREATIVE APPROACHES: SUPPORT FOR GROWING OLD IN AUSTRALIAN ABORIGINAL SOCIETY

A.S. Leichthammer, E.H. Thompson, *Sociology & Anthropology, College of the Holy Cross, Worcester, Massachusetts*

This study examined how Aboriginal culture affects the way elders seek care and how care is delivered. Observations were conducted at the Hetti Perkins Indigenous Retirement Home in Alice Springs, Northern Territory, Australia. Aspects of Aboriginal culture that emphasize spirituality and family structure strongly account for a distinct outlook on the meaning of growing old within Aboriginal society. Aboriginal culture places a stigma on seeking help beyond one's immediate family and holds totems including personal freedom, respect, and gender. Many of these cultural traditions are found institutionalized within the architecture and layout of care facilities which strongly represent the "dreaming stories"- the foundation of traditional Aboriginal spirituality. The Hetti Perkins facility's circular shape is symbolic of the circles in Aboriginal art, representing meeting places, campsites, or rockholes. Techniques, similar to the Eden Alternative, minimize the stigma associated with going beyond the family. Similarly, the manner in which the eld-

ers are treated and their relationships with caretakers within Hetti Perkin's convey the totems within their society, as evident through their liberal schedules, maximum autonomy, and gendered quarters. It is evident that to make care work as effective as possible, it needs to be modified to respect the cultural beliefs of the population receiving care, as On Lok has for San Francisco Chinese elders. Older nursing home residents have had a lifetime living with and fostering personal and cultural values which were key to their earlier coping and define their reaction to differing care delivery methods.

AGE AND ETHNIC DIFFERENCES BETWEEN AFRICAN AMERICAN, LATINO AMERICAN AND CAUCASIAN VETERANS PRESENTING FOR TREATMENT OF ERECTILE DYSFUNCTION

T. Rideaux¹, C. Preuss¹, S.A. Beaudreau², 1. PGSP-Stanford PsyD Consortium, Palo Alto, California, 2. Palo Alto Veterans Administration Health Care System and Stanford University School of Medicine, Palo Alto, California

Rationale. Erectile dysfunction (ED) is a significant public health issue for men of all ages and ethnic groups. Ethnic differences in the perception of ED, however, may exist due to differing cultural standards of sexual performance.¹ For instance, compared with Caucasians, older African American adults experience greater distress over ED.² Depression also poses a greater risk for ED for middle-aged and older Latinos compared with African Americans and Caucasians.³ We hypothesized that Latino and African Americans with ED would report greater distress (performance anxiety, major depression) despite better erectile functioning at time of treatment compared with Caucasians. **Participants.** 613 Caucasian, 128 African American, 97 Latino veterans seeking treatment for ED at the Palo Alto VA Andrology Clinic between 1980 and 2003. Median age in years was 63 (23-87). **Results.** Age by ethnicity interactions were detected for distress, but not erectile functioning. Specifically, older African Americans reported performance anxiety less often compared with younger adults of all ethnicities and older Caucasians and Latinos; older Caucasians reported performance anxiety less often compared with younger Caucasians. Younger and older African Americans were less likely to have depression at time of treatment compared with younger Caucasians. Only older age was associated with erectile functioning. **Conclusion.** Distress was less often reported by older African Americans possibly due to underreporting, resiliency, or reduced likelihood for those with high performance anxiety to seek treatment. Older Caucasian men also reported less distress compared with younger Caucasian men, whereas Latino men of all ages reported similar levels of distress.

PREDICTORS OF PSYCHOSOCIAL DEVELOPMENT OF GEROTRASCENDENCE AMONG JAPANESE OLDER ADULTS

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1.Purposes:This study has two objectives;(1)to test a conceptual model of psychosocial development among Japanese older adults using the Gerotranscendence Scale Type2 Japanese Version(GST2J), and(2)to examine physical, social, and psychological predictors of psychosocial development. **2.Methods:**Participants were 525 community dwelling Japanese older adults(Male=260, Female=265). The age range was from 60 to 94 years old(Mean Age=69.28 years old, SD=4.77). The questionnaire included the GST2J, the Short-Form-36 Health Survey Version2, the OARS Multidimensional Functional Assessment Questionnaire, Social Support Scale, CES-D, LSI-A, Erikson's Psychological Stage Inventory, and questions of social characteristics. **3.Results and Discussion:** A factor analysis confirmed the three factor structure of the GST2J(Cosmic Dimension, Coherence Dimension, and Solitude Dimension), as originally reported by Tornstam. Multiple regressions were

computed for each dimension of the GST2J. The Cosmic Dimension was significantly associated with age and social support($R^2=.03$, $p<.001$). Education, social support(provide), and EPSI were significantly associated with the Coherence Dimension($R^2=.40$, $p<.001$). LSI-A, social support(provide), and EPSI each had significant associations with the Solitude Dimension, although living style(not to live in own home) had a significant positive relation with it($R^2=.14$, $p<.001$). Age and EPSI were significantly associated with the total scale($R^2=.06$, $p<.001$). These findings provide support for use of the GST2J as a measure of psychosocial development among Japanese older adults, and suggest that the three dimensions of Gerotranscendence are associated with unique predictors.

COGNITIVE PERFORMANCE AND EMOTIONAL WELL-BEING OF OLDER PEOPLE IN VIETNAM

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As in many developing countries, Vietnam has a rapidly aging population, with few formal services to supplement traditional assistance from families. The current cohort of older people may face special vulnerabilities, having experienced war and social upheaval during their youth. The health authorities are expanding services, but often lack reliable information about the status of older adults. This paper reports findings on cognition and emotional well-being from a study of functioning of older adults living in Da Nang and surrounding rural areas. A representative sample of 600 people 55 and over was recruited, stratified by rural versus urban, gender and age. The sample was 50% women, 50% rural, and had a mean age of 70.33 (sd 9.10). Interviews were conducted in people's homes by trained interviewers. Measures were Vietnamese versions of widely used instruments or were back translated to determine fidelity to the original items, including the MMSE, the CES-D to measure depression, a measure of worry developed for this study, and ADL functioning. Mean scores indicated somewhat lower MMSE scores and higher scores of depressive and worry symptoms than typically found in Western samples. Linear regressions were used to examine predictors of the cognitive and emotional variables. Independent variables were age, gender, urban-rural and ADL limitations. Older people, women, rural residents and people with ADL limitations had higher rates of depressive symptoms and worries and lower cognitive performance. These results indicate considerable potential need in the older population, with cognitive and emotional symptoms likely to accompany ADL limitations.

A HIERARCHICAL MODEL OF GEROTRASCENDENCE AMONG THE OLDEST OLD IN THE AMAMI ARCHIPELAGO

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Two separate studies were carried out to explore the conceptual formation of gerotranscendence among the oldest old in the Amami Archipelago where the centenarian ratio is higher than that of the neighboring island of Okinawa (66.06 vs. 42.49 centenarians per 100,000). In Study 1, an 11-item Gerotranscendence Scale (GTS) was created, and 102 oldest old (mean age=90) responded to this questionnaire along with a series of questions including life satisfaction, sense of attachment to local community, self perception of own aging, activity level, and loneliness. An exploratory factor analysis extracted three psychological factors from the GTS: ego transcendence, material transcendence, and cosmic transcendence. In general, the findings indicate that overall gerotranscendence is closely associated with "positive" aspects of aging such as higher levels of self-maintenance and lower levels of one's own sense of aging. Further, while 92.8% perceived themselves

as “quite old,” they reported low levels of loneliness (26.7%) and high levels of life satisfaction (93.4%) and attachment to the community (93.7%). In study 2, 11 oldest old were interviewed. The transcribed qualitative data were then analyzed by a Modified Grounded Theory Approach (M-GTA). The overall results reveal a hierarchical model of gerotranscendence consisting of three layers: 1) the psychological layer (i.e., ego, material, and cosmic transcendence); 2) the phenomenological layer (e.g., a strong will to live until 100), and 3), and the experiential layer (e.g., histo-cultural characteristics).

LIFE SATISFACTION AS A PREDICTOR OF LONG-TERM MORTALITY AMONG OLDER PEOPLE IN THE UK AND TAIWAN

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There is limited evidence of the relationship between quality of life and mortality among older people. The relationship between quality of life and mortality may be mediated through different demographic, health, and social factors that may interact over time, and affect the impact on long-term survival. The present study aimed to examine the relationship between life satisfaction (as a component of quality of life) and long-term mortality among older people in the UK and Taiwan. Data were derived from the 1989 wave of two nationally-representative samples of older people: the Nottingham Longitudinal Study of Activity and Ageing (NLSAA) in the UK, and the Survey of Health and Living Status of the Elderly in Taiwan (SHLSET). Mortality data for the 14-year follow-up period (1989-2003) were obtained from the two studies. Cox regression analysis was used to determine the role of life satisfaction in predicting mortality, in unadjusted models and when controlling for demographic characteristics, physical and mental health, and social engagement. Life satisfaction score was significantly associated with 14-year mortality in both countries, the higher the score the longer the survival. In the Taiwan sample, this relationship was explained by physical and mental health and social engagement, while in the UK the relationship was independent of demographics, physical and psychological health and social engagement. The study provides evidence on the importance of life satisfaction in relation to long-term mortality in older people. Cross-cultural differences may be important in explaining the relationship.

SESSION 1265 (SYMPOSIUM)

FACILITATING COGNITIVE PERFORMANCE IN OLD AGE: COGNITIVE AND PHYSICAL INTERVENTIONS

Chair: *B. Godde, Jacobs Center on Lifelong Learning, Jacobs University, Bremen, Germany*

Discussant: *C. Hertzog, Georgia Institute of Technology, Atlanta, Georgia*

With aging populations in most industrialized societies the question of how older adults can maintain or improve their cognitive functioning has gained increasing importance. Decades of cognitive training research have demonstrated that improvement is possible but also that training gains are highly specific. More recently, cardiovascular fitness interventions showed general effects on cognitive functioning in old age. This Symposium will provide latest evidence on different types of training and their effects on cognitive functioning in old age and discuss the specificity and generality of such effects. We aim to get together researchers working on different types of cognitive training interventions. Thus, the symposium will contribute to answering the question what successful and sustainable interventions should look like and what the specific advantages of the different types of training are. Claudia Voelcker Rehage will present data from a one-year longitudinal intervention study with older adults trained in physical fitness or motor coordination and tested for differential effects of these interventions on cognition and related brain activations. Florian Schmiedeck will talk about

the intra-person dynamics during cognitive training. Lars Nyberg's presentation will focus on the question whether and under which conditions transfer results from cognitive training interventions. In her contribution, Denise Park will report about the beneficial effects of social activities on cognitive functioning of older adults. Finally, Christopher Hertzog will discuss the presented findings from the perspective of the specificity and generality of training interventions in old age.

CARDIOVASCULAR AND COORDINATION TRAINING DIFFER IN THEIR EFFECT ON COGNITIVE PERFORMANCE IN OLDER ADULTS

C. Voelcker-Rehage, B. Godde, U. Staudinger, Jacobs University Bremen, Bremen, Germany

Recent studies revealed a positive influence of physical activity on cognition in older adults. Studies, however, that investigate the effects of different types of interventions and longer-term effects are missing. We performed a 12-month longitudinal study to investigate the effects of cardiovascular and coordination training (control group: relaxation and stretching) on cognition in older adults. 49 Participants (age: 62–79 years) were trained 3 times a week. On the behavioral level, both experimental groups improved in executive functioning but with differential effects on speed and accuracy. In parallel, neurophysiological results also revealed different changes (increases and reductions) in brain activity for both interventions in frontal, parietal, and sensorimotor cortical areas. Our data suggest that besides cardiovascular training also other types of physical activity improve cognition of older adults. The mechanisms, however, that underlie the performance changes seem to differ depending on the intervention.

THE COGITO STUDY: PLASTICITY OF COGNITIVE ABILITIES DUE TO 100 DAYS OF COGNITIVE PRACTICE

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In the COGITO study, 101 younger (20-31 years) and 103 older (65-80 years) adults practiced a battery of cognitive tasks for an average of 100 daily sessions. The cognitive battery comprised three working-memory, three episodic-memory, and six perceptual-speed tasks evenly distributed over verbal, numerical, and figural-spatial domains. Before and after practice, ten pretest and ten posttest sessions included a comprehensive assessment of near and far transfer tasks to investigate whether practice-related improvements are confined to trained skills or enhance intellectual functioning in a more general way. We present analyses of practice effects on trained tasks and near and far transfer at the task level as well as at the ability level defined by latent factors of transfer tasks. Furthermore, we investigate correlates of transfer at the behavioral (correlations of transfer effects with improvements on practiced tasks) and at the neuronal level (fMRI, MRI, DTI).

LEARNING AND TRANSFER IN RELATION TO COGNITIVE PROCESSES AND UNDERLYING BRAIN SYSTEMS

L. Nyberg, Umea University, Umea, Sweden

In an fMRI study we found that younger adults activated striatal regions during both criterion and transfer tasks at a pre-training session, and they showed training-related striatal activity increases for both tasks after 5 weeks of updating training along with significant performance enhancements. In contrast, older adults showed weak striatal recruitment pre-training, and training-related performance changes and striatal activation increases were limited to the training task. Follow-up analyses revealed that elderly with larger striatal activation changes showed positive transfer effects. These findings suggest (a) that generalization of learning required that the criterion and transfer tasks engaged overlapping processes (updating) and brain regions (striatum), and (b) that aging imposed constraints on transfer by affecting striatal systems. Preliminary support for these suggestions comes from a recent study

of training of another executive process (switching), and from a multimodal imaging study of how age-related dopaminergic alterations relate to age-related changes in fMRI activity.

THE SYNAPSE PROJECT: EXPERIMENTALLY MANIPULATING AN ENGAGED LIFESTYLE TO ASSESS ITS EFFECT ON COGNITION

D.C. Park, J. Lodi-Smith, *Center for Brain Health, University of Texas at Dallas, Dallas, Texas*

The Synapse Project is designed to assess the impact on cognition of changing an older adult's lifestyle from passive to one of social and/or intellectual engagement. The project involves random assignment of adults 60 and older to one of six environments for 15 hours a week or more for 12 weeks. The environments include (a) professional quilting instruction; (b) professional photography instruction; (c) combination of quilting and photography; (d) social engagement without instruction; (e) a placebo control that works on passive projects at home; and (f) a no treatment control. All subjects are well-characterized behaviorally and with functional MRI pre- and post-engagement. Methodological and design issues in designing an "engaged lifestyle" study will be discussed.

SESSION 1270 (SYMPOSIUM)

INCREASING GERIATRIC NURSING CAPACITY: ACADEMIC EXEMPLARS

Chair: *L.E. Benefield, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

Discussant: *D. Wallace, University of North Carolina - Greensboro, Greensboro, North Carolina*

The aging population is growing dramatically and older adults will have unprecedented health and illness needs, calling for expert leaders, educators, and practitioners in geriatric nursing. These consumers and their families require specialized nursing support and services. At a time when consumer need is increasing, the shortage of qualified geriatric nurses is becoming more acute. This shortage of nurses skilled in geriatric care is two-fold: a severe shortage of expert geriatric nursing faculty and a growing shortage of practicing geriatric nurses. This symposium describes academic exemplars developed by five U.S. colleges of nursing aimed at increasing the number of highly qualified new and existing faculty and practitioners who will provide leadership in geriatric nursing. Initiatives will be detailed including necessary leadership and structure, strategic planning, customer and market analysis, implementation process and timeline, costs and results. Exemplars include: 1) creation of a statewide geriatric nursing education network of 22 faculty champions and shared-use educational materials, 2) a systematic and focused curriculum enhancement across programs of geriatric-focused RN-BSN completion, post-BSN certificate, and specialized course at graduate level, 3) a public/private university partnership with educational activities including student/faculty publications and a jointly designed online course and seminars, 4) development of a RN-BSN geriatric education model specifically focused on urban, rural and medically underserved populations, and 5) a novel post-master's certificate in advanced practice gerontological nursing to enhance skills of advanced practice nurses. These initiatives provide accessible and affordable geriatric-focused mechanisms required to prepare nurses to better care for older adults.

OKLAHOMA GERIATRIC NURSING EDUCATION WORKGROUP: COLLABORATION TO INCREASE STATEWIDE GERIATRIC NURSING CAPACITY

L.E. Benefield, C.M. Lyons, R. Loar, P. Smith, K. Broussard, B.J. Holtzclaw, *University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

As part of the newly formed Reynolds Center of Geriatric Nursing Excellence at the University of Oklahoma, a unique faculty collabora-

tion and training model was created to translate emerging gerontologic knowledge to inform optimum care of older adults. The statewide Oklahoma Geriatric Nursing Education Workgroup (OGNEW) includes faculty selected by their institutions to serve as champions for evidence-based geriatric nursing education with goals to improve quality and availability of geriatric nursing education statewide. OGNEW participants attend meetings and videoconferences designed to disseminate best practices on implementing geriatric content in their nursing curriculums and access on-line shared-used educational materials from the Center. First six months outcomes include a successful statewide geriatric liaison across 20 nursing programs, a user-friendly website designed with and for the champions, identified strategic methods for on-line dissemination of best-evidence educational materials, and specific methods of communication among champions. Implications for use across other academic settings are detailed.

AN INNOVATIVE PUBLIC/PRIVATE PARTNERSHIP FOR ENHANCING GERIATRIC NURSING EDUCATION

A.M. Kolanowski¹, K. Richards², N. Strumpf², L.K. Evans², J. Penrod¹, D.M. Fick¹, *1. School of Nursing, Penn State University, University Park, Pennsylvania, 2. University of Pennsylvania, Philadelphia, Pennsylvania*

The Schools of Nursing at Penn State and the University of Pennsylvania both have Hartford Centers of Geriatric Nursing Excellence. The geographic proximity of the two schools, their complementary missions, and their unique strengths in geriatric nursing opened an unprecedented opportunity to enhance "collective productivity" toward preparing increased numbers of outstanding geriatric nursing educators. In this paper we describe the planning, leadership and structure, and support garnered for an innovative partnership between the two universities and centers. A number of collaborative activities enhance students' educational experience, such as the jointly designed online educational course (Teaching Translational Science) that is taught across both universities, co-authored student/faculty publications, and combined Hartford Scholars Seminars. Through these experiences and others, students are exposed to world-renowned faculty and have the opportunity to consider and pursue graduate/post-graduate study at the institution which most closely matches their career goals.

THE GERIATRIC WORKFORCE ENHANCEMENT PROJECT

B.E. Barba, *School of Nursing, Community Practice Department, University of North Carolina at Greensboro, Greensboro, North Carolina*

The goal of the project was to establish an academic education model in which RNs pursuing baccalaureate degrees were prepared to assume leadership roles in the provision of culturally competent geriatric care in urban, rural, and medically underserved populations. In addition to augmented courses, a variety of gerontology learning activities were provided to meet the individual learning needs, including seven elective gerontology academic courses. All participants completed the educational program Teaching Geriatric Nursing Care, a geriatric teaching project, and geriatric-focused clinical experiences. Accomplishments toward project goals were monitored, including evaluation of early impact on professional nursing roles and employment issues. Project staff facilitated leadership roles of graduates as Geriatric Nursing Care Trainers in their employing facilities and as faculty in geriatric training programs. Individual-level outcomes and system-level impacts, such as geriatric training of other nursing personnel and unit policy changes were determined.

POST-MASTERS CERTIFICATE OPTION IN ADVANCED PRACTICE GERONTOLOGICAL NURSING

T.A. Harvath¹, H.M. Young³, L. Lee², 1. *School of Nursing, Oregon Health & Science University, Portland, Oregon*, 2. *Portland VA Medical Center, Portland, Oregon*, 3. *University of California-Davis, Davis, California*

Most older adults receive care from health professionals whose educational preparation focused on younger adults. Older adults have very complex health care needs, and increased numbers of advanced practice nurses are urgently needed to provide leadership and high-quality care to this growing and vulnerable population. To meet these unmet needs, we developed an online Post Master's Certificate in Advanced Practice Gerontological Nursing to enhance the capacity to serve older adults. Graduates of this program are prepared to function in a variety of roles with a diverse clientele of older adults, their families and caregivers within a variety of settings. Unique to this program is an emphasis on health issues of vulnerable older adults and a particular focus on rural health and long term care. The program consists of 9 credits of didactic and up to 7 credits of clinical practica. Arrangements for clinical placements are tailored to individual student needs.

ENHANCING BASIC AND ADVANCED GERIATRIC NURSING COMPETENCE

G. Pepper, P.H. Berry, V.J. Flattes, J. Abramson, *College of Nursing, University of Utah, Salt Lake City, Utah*

While the shortage of registered nurses is projected to increase nationally through 2030, the shortage of nurses prepared for clinical and academic roles in geriatric nursing is even more severe. To enhance the clinical competence in geriatric nursing of baccalaureate, master's, and doctoral graduates, the curriculum of each program was augmented and evaluated. The Geriatric Nursing Leader program is a transcribed geriatric emphasis consisting of all 31 credits of geriatrics-focused baccalaureate completion (RN-BS) or 14-credit post-baccalaureate certificate, including coursework in interdisciplinary research, evidence based practices, and organizational change capstone project. At the graduate level adult care specialties were universally enhanced with three credits in geriatrics tailored to the specialty (teaching nursing, nurse practitioners (adult, family, women's health, acute care, psychiatric mental-health), and informatics. While only 3% of advance-practice nurses are geriatric specialists, over 10% graduates in our MS and DNP programs graduate with a 9-15 credit geriatric sub-specialization.

SESSION 1275 (POSTER)

LIFE COURSE

SAFE PASSAGE OF GOODS AND SELF IN LATER LIFE: A RECONSIDERATION

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"Safe passage" is a term for special dispositions of possessions that aim to protect the physical and symbolic properties of things. In later life, the finitude of life time and the desire to leave a legacy may propel such special dispositions. Safe passage, thus, can be an activity on behalf of the self as well as the thing. This study investigated the role of safe passage as a divestment technique during the course of residential relocation from larger to smaller quarters. As part of an ongoing study in the Midwest, we interviewed 39 individuals aged 62 to 89 about their possession management during the course of a community-based move. Interviews considered the disbandment of the whole household, not just selected, cherished possessions (a common technique in possession studies). Our informants did relay rounded accounts of safe passage, but it was not a dominant mode of disposition. More common were partial stories about the satisfactory disposition of things. These expressed contentment with the fate of the thing but with little detail

about the initiative that brought the safe passage about, any intention toward legacy, or any cherishing by the new owner. Some transfers came about as family and friends claimed things in ways that were unexpected and even surprising. We conclude that safe-passage stories can reconstitute the self as agentic, supporting a presentation of the self as conscientious and careful with belongings despite having released them.

LONELINESS AMONG DISABLED MARRIED OLDER ADULTS: DOES MARITAL QUALITY MATTER?

D.F. Warner, J. Kelley-Moore, *Sociology, Case Western Reserve University, Cleveland, Ohio*

We find that married persons with more limitations report greater loneliness. Marital quality is related inversely to loneliness: positive marital quality is associated with lower loneliness scores and negative marital quality associated with higher loneliness scores. Consistent with our hypothesis, marital quality significantly moderates the association between functional limitations and loneliness—although this effect is limited to positive marital quality. Older adults with above average positive marital quality are buffered from the negative consequences of functional limitations for loneliness, while those with below average marital quality are substantially lonelier with more functional limitations. This pattern of findings is robust in the face of demographic, socioeconomic status, and social integration controls. We find that these associations are similar for women and men. Overall, our findings suggest that quality of an older adult's marriage has important consequences for coping with functional limitations, at least in terms of loneliness.

DISENTANGLING INSURANCE-MARITAL STATUS INTERACTION EFFECTS AS PREDICTORS OF THE LIFE COURSE OUTCOME EARLY RETIREMENT: AN EXAMINATION OF WOMEN AS A NEGLECTED POPULATION COMPARED TO MEN

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Whether or not one has employment-based health insurance has become recognized as a factor relevant to remaining employed. Prior research looked at either only samples of men or mixed gender samples. In this study, how women who decide to stay in the labor market differ from those who leave the labor market and from men is analyzed utilizing interactions of employment-based health insurance status and marital status. In two additional models I classify variables according to family and household-oriented and gender-relevant resources in order to explore the extent to which "female" life course predictors play a role in early retirement for women compared to men. Longitudinal data from the Rand version of the Health and Retirement Study are utilized, using time waves 2004 and 2006.

EXPLORING AND EXAMINING THE EXPERIENCE OF REGRET AMONGST MID-LIFE AND OLDER ADULTS

E. Hollywood, O. Ann, J. McEvoy, R. Bond, *Nursing, Dundalk Institute of Technology, Dundalk, Ireland*

People are living longer than ever before and with extra years comes more time to experience errors and losses relating to the self and others. Regrets about the past can be a common psychological phenomenon experienced by up to 90% of older American adults (Wrosch, 2007). Individuals who ruminate about regrets can also experience higher levels of anxiety, anger and depression (McKee 2005). This study describes the development of a new tool to assess regrets amongst mid-life (age 50+ years) and older Irish adults. From the survey, the prevalence of regrets are discussed, as well as the relationships between regrets and bio-psychosocial well-being. This study is part of the larger Nestling Project survey which aims to provide a better understanding of the health and well-being of older Irish adults, and to understand the ways more integrated service delivery, and community cooperation can facilitate ageing-in-place. Regrets can impact adversely on health and quality of life of older adults and further research is needed. This presentation

can contribute to this field through the discussion of a new regrets scale, detailed analyses about the prevalence and consequences of regrets, and the use of in-depth interviews exploring the nature and complexity of later life regrets.

HEALTH DISPARITIES IN HEALTH STATUS ACROSS THE LIFE COURSE

C. Unson, *Public Health, Southern Connecticut State University, New Haven, Connecticut*

Objective: This study investigates whether health disparities pertaining to health status persists throughout the life course. **Methods:** The sample from the BRFSS 2007 of a New England state was categorized into three age groups: 18-39, 40-59, 60 and older. The weighted sample was estimated at 2.6 million based on a sample of 7,360. Proportions reporting fair to poor health by race/ethnic groups and age groups were estimated using SUDAAN. Relative risk ratios comparing self-reported non-Hispanic whites to non-Hispanic blacks and Hispanics for each age group were estimated and compared. **Results:** The proportions reporting fair/poor health were 10% for the first two age groups and 20% for the oldest age groups. For non-Hispanic whites, the proportions were 7%, 8%, 18% respectively; for non-Hispanic blacks, 13%, 19%, 37% respectively, and for Hispanics, 26%, 24%, 46%. The proportions by race/ethnic groups were significantly different across the age groups ($p < .001$). Non-Hispanic blacks were about twice as likely to report fair/poor health in all age groups compared to non-Hispanic whites ($RR=1.93, 2.37, 1.99$ respectively). Hispanics were almost four times as likely in the youngest age group ($RR=3.89$), three times in the middle age group ($RR=2.97$), and twice in the oldest age group ($RR=2.5$). **Conclusion:** More Hispanics and non-Hispanic blacks report fair to poor health than non-Hispanic whites, especially in the oldest age groups. Hispanics fare worse than non-Hispanic blacks. Disparity measures between non-Hispanic whites and non-Hispanic blacks are similar across the age groups. Disparity measures between non-Hispanic whites and Hispanics decrease with increasing age.

DIFFERENCES IN SELF-RATED HEALTH TRAJECTORIES BETWEEN GENDER AMONG ELDERLY JAPANESE PEOPLE

T. Nakata, *Department of Welfare, Hokusei Gakuen University, Sapporo, Japan*

The aims of this study is to examine the differences in self-rated health patterns between males and females from 60 years among Japanese people. 60 years was a key age among Japanese, because the mandatory retirement was conducted at 60 among almost all the companies and older people were obliged to deduce both their status and income at 60. And 'male breadwinner model' comprises a large part of households in Japan. Therefore, disparities in the pattern of worsening health between retired males and their housewives merit careful examination. This study employed the National Survey of the Japanese Elderly, from wave I to wave III, which was conducted by Michigan University and Tokyo Metropolitan Institute of Gerontology. Fixed/random effect models applying pooling data constructed from panel data was used. The dependent variable was Self-rated health and duration from 60 years and, dummy variable of occupational status and marital status were used as the independent variables. The results are as follow; 1) continue to work after 60 has had an impact on self-rated health for both gender. 2) 'married' males tend to feel healthier, but female don't. 3) duration after 60 years and its square term affect the health for women only. These facts reveal that there are some differences in health pattern between the genders and these are reflected by the Japanese characteristics in work and retirement. These results showed that there are transformations even later in life, though some traditional theories among gerontology seem to capture elderly people statically.

LIFE HISTORIES REVEAL CHANGING STRATEGIES TO COPE WITH COMBAT-INDUCED PTSD

E. Covan, *Health and Applied Human Sciences, UNC Wilmington, Wilmington, North Carolina*

Personal attributes, stratification, birth cohort and period effects among aging Vietnam combat veterans, reveal the impact of combat (1966-1971) on subsequent life history. Haunted by memories of war and rejection by contemporaries, veterans who suffer from chronic combat-induced PTSD note trial and error strategies to control symptoms change as they get older. Risk-taking, self-medication, and escaping condemnation through avoidance in young adulthood are supplemented with attempts to fit in through workaholicism or building a family. The latter strategies do not help with anger management, failing in middle-age if not before, when neither employers nor family members approve. In early aging, physical illnesses and changing social climate may encourage combat veterans to seek professional help, although they still engage in self-initiated strategies to control their own behaviors. The fortunate find a modicum of peace, accompanied by combat brothers with whom they review the meaning of survival and commit to helping the next generation of warriors.

PHYSICAL ABUSE IN CHILDHOOD, DAILY WELL-BEING, AND THE ROLE OF DAILY STRESSORS

L. Pitzer, K. Fingerman, D. Mroczek, *Child Development and Family Studies, Purdue University, West Lafayette, Indiana*

Prior research established that victims of childhood physical abuse are at risk for lower well-being in adulthood. The effects of such abuse on daily well-being have not been considered in detail, particularly considering the effects of daily stressors. This study examines the association between childhood physical abuse and daily indicators of well-being and how daily stressors (interpersonal vs. work/home) may account for individual variation in this association. The sample included participants from the National Study of Daily Experiences (NSDE), an 8-day daily diary study. This study included participants aged 25 to 74 ($M = 47$, $SD = 13.07$) who indicated that they were either severely physically abused (kicked, bit, hit with a fist; burned or scalded) by their parents or that they never experienced such abuse ($n = 931$). Multilevel models were used to examine the association between childhood physical abuse and daily negative affect and physical symptoms. Results revealed that childhood physical abuse was associated with poorer physical (estimate = .11, $p < .01$) and psychological (estimate = .12, $p < .01$) health. Interactions showed that on heightened work/home stressor days, levels of negative affect were exacerbated for victims of childhood abuse (estimate = .06, $p < .05$). Consistent with other literature, this study shows that work/home stressors, and not interpersonal stressors, are more salient to individuals in midlife. These results also give evidence for cumulative disadvantage. Individuals who are abused may be particularly more reactive to work/home stressors in part due to other disadvantages experienced over the life course.

MODERATORS OF THE RELATIONS BETWEEN SELF-REPORTED AND DIRECTLY OBSERVED FUNCTIONAL CAPACITY IN CENTENARIANS

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The purpose of this study was to examine whether centenarians' self-report of their ability to perform basic and instrumental daily living (BADL and IADL) skills was congruent with their actual performance of these tasks. Because multiple factors are known to moderate the relationship between subjective appraisal of performance competency and objective performance, we investigated cognitive (Mini-Mental State Examination) and personality variables (NEO, Geriatric Depression Scale (GDS), Affect Balance Scale (ABS)) that could potentially mod-

erate this relationship. Participants consisted of 244 centenarians from the Georgia Centenarian Study. Participants were administered the GDS and the Direct Assessment of Functional Status (DAFS) and estimated their predicted ability on each task from the DAFS. Proxy report data were used for the ABS and NEO. Moderated multiple regressions evaluated the significance of each putative moderator of the relationship between objective score on the DAFS IADL or BADL scale and the subjective appraisal of IADL or BADL performance. Cognitive impairment, elevated depressive symptoms, higher affect balance ratios and lower levels of conscientiousness appear to distort subjective appraisals of self-competence in performing instrumental daily living skills. Only lower conscientiousness appears to distort self-appraisal of basic ADL competence. While most trait level factors did not moderate the relationship between subjective appraisal of performance and actual performance of IADL skills, state factors (current depressive symptoms, affect balance, and cognitive functioning) exerted a greater moderating influence on this relationship.

MODELING REDUCTION OF OUTCOME REACTIVITY IN ADAPTATION TO HEALTH AGGRAVATIONS IN VERY OLD AGE

O.K. Schilling, *Department of Psychological Ageing Research, University of Heidelberg, Heidelberg, Germany*

Psychological concepts of adaptation imply some kind of reduction of stimulus responsiveness, as the stimulation continues. With respect to adaptation to irreversible loss of physical health in very old age, this implies an attenuation of relationships between health constraints and psychological outcomes when the health adversities accumulate. Moreover, in very old age, functional abilities of the old individuals affected by health adversities may play a crucial role in mediating health impacts on psychological outcomes. Thus, this study presents methods to model such reduced responsiveness due to adaptation, implying functional ability as mediator, by the use of latent growth curve modelling techniques. To demonstrate the strategies, longitudinal data (4 measurement occasions) from the research project ENABLE-AGE (N=450 German elders, aged 80-89 at baseline 2002), followed up since 2008 with the project LateLine, was used. Changes in life satisfaction and functional abilities were modelled depending on health status at baseline (number of health symptoms, diagnoses). Results confirmed expectations of a general mediator role of functional status, and an adaptive weakening of the modelled relationships with growing accumulation on health problems. Summing up, the study proposes analytical strategies which appear promising for the study of adaptive dynamics of adverse health consequences in very old age,

SESSION 1285 (PAPER)

NEIGHBORHOODS INFLUENCES AND AGING

NEIGHBORHOOD DYNAMICS OF SOCIAL ENGAGEMENT AND WELL BEING AMONG OLDER ADULTS

J.A. Ailshire, *Sociology, University of Michigan, Ann Arbor, Michigan*

A growing number of studies show that neighborhoods play a central role in shaping the social experiences and well being of residents. However, research on the role of the neighborhood social environment in shaping social relationships and psychological well being among older adults has been largely absent. Using data from the Chicago Community Adult Health Study (2002), I examined the role of the neighborhood structural characteristics on social engagement and psychological well being among adults age 45 and older (N=1133). Neighborhood structural characteristics come from the 2000 Census and include socioeconomic disadvantage, percent non-Hispanic black, population density, age structure, and residential stability. Social engagement is determined by respondent's reports of their level of social participation, integration, and support and psychological well being is assessed using respondent

reports of loneliness and depressive symptoms (CESD). Multilevel regression models are estimated separately for different aspects of social engagement and psychological well being and control for age, gender, race/ethnicity, marital status, education, and income. I found that higher socioeconomic disadvantage is associated with lower levels of informal social support ($p<.05$) and higher levels of loneliness ($p<.10$) and depression ($p<.05$). In addition, individuals living in more residentially stable neighborhoods report higher levels of social support ($p<.05$) and lower levels of loneliness ($p<.05$). Neighborhood structural characteristics had no effect on social participation or social integration. These results highlight the important associations between structural aspects of the neighborhood social environment and social engagement and psychological well being among older adults.

URBAN NEIGHBORHOODS AND HEALTH DISPARITIES IN LATE MIDDLE AGE

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This study utilizes a life course conceptual framework to evaluate the longitudinal impact of urban neighborhood socioeconomic disadvantage on self-rated health among pre-retirement age persons as they grow older. Neighborhood-related health disparities will be examined with multilevel growth curve modeling using data from the original Health and Retirement Study (HRS) cohort, consisting of persons aged 51-61 years at their 1992 baseline assessment. Neighborhood context is operationalized with U.S. Census tract data from both 1990 and 2000. The presence of information about neighborhoods at two points in time enables us to make stronger inferences about the probable health impact of neighborhood than is possible with the cross-sectional design of most neighborhood research. By assessing dynamic neighborhood health effects, we capture the time interval leading up to age 70, an interval often characterized by important life course transitions, including retirement, spousal bereavement, and the emergence of underlying clinical manifestations of physical illness. We hypothesize that the most negative health effects of living in areas of socioeconomic disadvantage will be among those who consistently live in such areas over time, and those who live in areas that deteriorate over time. We also hypothesize that the health effects of neighborhood will be contingent upon individual-level characteristics due to differential vulnerability of poor persons.

NEIGHBORHOOD ENVIRONMENT AND PERCEIVED HEALTH STATUS FOR OLDER ADULTS: FINDINGS FROM THE CHICAGO HEALTH AND AGING PROJECT

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Neighborhood environment is associated with health behaviors and health status for older adults. We investigated the association between neighborhood environment and perceived health status for older adults using data from the Chicago Health and Aging Project (CHAP). CHAP is a longitudinal population-based study of Blacks and Whites, over age 65 (n=5512). There were three types of neighborhood data: 1) perceptions: participants were asked about the perception of their neighborhood environment; 2) census block group demographic data and; 3) direct observation: systematic observation of street blocks within each census tract. We used exploratory factor analysis to identify clusters of related variables. Five factors emerged: 1) "socioeconomic status"; 2) "commercial services"; 3) "unemployment"; 4) "social cohesion"; 5) "social disorder." For each factor, we calculated the mean of the z scores of the variables that clustered. Perceived health status as fair or poor=1 vs. rest. We used multivariate logistic regression models, adjusting for age, sex, race/ethnicity, education, marital status, and smoking. "SES" and "unemployment" are associated with perceived health status. People who live in the lowest "SES" quartile had 34% higher odds of reporting fair/poor health than those living in the highest quartile (OR=1.34

; 95% CI: 1.01,1.78). People who live in second lowest quartile of census block group unemployment have 29% increased odds of fair/poor health compared to people in the highest quartile (OR=1.29; 95% CI: 1.07,1.56). The other neighborhood factors were not associated with perceived health status. Neighborhood composition emerges as more important than services and perceived environment for older adults.

NEIGHBORHOOD CONTEXT OVER ADULTHOOD AND HEALTH IN LATER LIFE

A. Pienta¹, D. Ghimire², 1. ICPSR, University of Michigan, Ann Arbor, Michigan, 2. University of Michigan, Ann Arbor, Michigan

Numerous studies have examined the extent to which neighborhood characteristics affect health outcomes in later life. One of the limitations of past research, however, is that neighborhood context typically involves a set of measures from a single point in time. The life course perspective suggests that later life health is shaped and influenced by a wide range of factors throughout one's life. Using longitudinal data from Nepal, a place that has undergone rapid social changes which can be measured at the neighborhood level, we examine how neighborhoods in a rural area have changed throughout adulthood and into later life. We estimate both fixed-effects (OLS regression models) and mixed models. In the Chitwan Valley of Nepal, we find that even in just the last 10 years, neighborhoods have undergone extensive social changes such that there is better access to schools, employment opportunities, markets, bus transportation, movie theaters, and health care. Further, we find the time-lagged (10 years prior) neighborhood measures are actually better predictors of health outcomes in later life. Specifically, we show that people who lived further from health posts and markets in adulthood have poorer self-rated health and functional health status in later life. After attending this presentation, participants will better understand how health outcomes are influenced by neighborhood factors over the life course.

GEOGRAPHICAL ACCESS TO HEALTHY/UNHEALTHY FOODS IN OLDER POPULATION: SPATIAL ANALYSIS USING GEOGRAPHIC INFORMATION SYSTEM (GIS)

T. Yamashita^{1,2}, S. Kunkel^{1,1}, 1. Miami University, Oxford, Ohio, 2. Scripps Gerontology Center, Oxford, Ohio

The association between diet and health has been well-established. Poor nutrition is related to obesity, heart disease and other leading causes of death. Access to healthy food options is a critical component of a healthy diet. Older adults are more likely to be disadvantaged in this regard due to limited mobility which can affect geographic access to healthy foods. Little is known about geographical accessibility of foods in the community-dwelling older population; measurement problems and underdeveloped assessment methods contribute to the lack of information on this topic. In this study, geographical access to healthy and unhealthy foods in older populations living in a mixed urban/suburban county in Ohio is assessed using the Geographic Information System (GIS). Using data obtained from the U.S. Census Bureau and local health departments, road network distance and travel time to different kinds of food outlets are quantified and visualized in a map format. The x2 test of independence, OLS regression and map overlay analysis are used to assess the relationship between proportion of population that is older and accessibility of healthy and unhealthy food outlets. While accessibility of healthy and unhealthy foods are positively associated ($r^2 = 0.35$), areas with higher number of older populations are more likely to be more than 0.5 mile (walking distance) away from healthy food outlets compared to unhealthy food outlets ($x^2 = 410.4$, $p < 0.001$). In addition to these statistical analyses, two- and three-dimensions maps are created to visually present the locations of disadvantaged healthy food access areas.

SESSION 1290 (SYMPOSIUM)

QUALITATIVE INQUIRY AND RESEARCH DESIGN: EXPLORING A DIVERSITY OF METHODS

Chair: C.M. Gallogly, St. Joseph's College, Patchogue, New York
Discussant: A. Kydd, University of the West of Scotland, Hamilton, Scotland, United Kingdom

The Qualitative Research Interest Group discovered during the 2008 meeting that members wanted to explore in more depth the diverse methods that were being utilized in qualitative inquiry. Given the challenging questions that qualitative researchers ask, the methods have had to expand and diversify in order to handle the unusual data and the sources of that data. This symposium will bring together four researchers who are exploring different techniques for analysis. These four methods include the analytical process of photo elicitation; the Boyatzis method of analyzing themes using ATLAS.ti; and two studies that interrelate numerous sources of data in order to advance their research questions.

CREATIVE MOVEMENT IMPROVISATION AS AN INTERVENTION FOR ADULT DAUGHTERS PROVIDING CARE TO FRAIL MOTHERS

L.K. Donorfio¹, M. Vracevic², 1. Human Development and Family Studies, University of Connecticut, Waterbury, Connecticut, 2. University of Connecticut, Storrs, Connecticut

This research used creative movement improvisation as an intervention technique to explore its impact on relieving stress for adult daughters providing informal care to their frail mothers. Two other intervention techniques were also used for comparison purposes. The final three intervention techniques were creative movement improvisation, a home based "tip of the week, and a caregiver's support group. Because the first two intervention techniques were relatively new to the caregiving intervention literature, it was unclear as to how to most effectively collect and analyze the data. Using various qualitative collection techniques can pose a challenge to researchers as to how the data could best reported, collected, and analyzed. This presentation will focus on the research design and the steps taken to effectively collect the data of each of the intervention techniques. All the intervention groups were considered successful to some degree with all participants indicating that they would enroll in their respective intervention group again in the future. Challenges specifically using creative movement improvisation as an intervention technique with adult daughters providing care to frail mothers will be discussed, as well as what changes will be made to better utilize and measure this intervention technique in future research.

USING THEMATIC ANALYSIS TO EVALUATE PARTNERSHIPS BETWEEN PUBLIC HEALTH AND PRIMARY CARE

C. Irmiter¹, J. Bates², M. Gadon¹, P. Sloane², 1. American Medical Association, Chicago, Illinois, 2. University of North Carolina Chapel Hill, Chapel Hill, North Carolina

Objective: To identify and describe successful collaborations between public health organizations and medical practices in terms of development, structure, barriers/facilitators, and keys to sustainability. Methods: Based on a three-step approach, we interviewed staff of 48 partnership, with a subsample of 16 were purposively selected for in-depth interviews with both staff members and a participating physician. Boyatzis' (1998) thematic analysis was used along with ATLAS.ti. Results: Most programs met a community or clinical need. Barriers to the partnerships include: time/budget constraints, poor communication, and staff turnover. Keys to overcoming barriers include: finding common ground, having champions, creating win-win situations, addressing public health needs, using feasible communication methods, and obtaining funding. Sustainability was attributed to committed leadership, organizational buy-in, multimodal communication, funding, evidence of cost-

effectiveness, clear benefits to medical practices, and a vision for expansion. Conclusion: Existing models provide many lessons as to how such partnerships can be initiated and sustained.

USING MULTIPLE QUALITATIVE METHODS FOR EXPLORATORY RESEARCH

M. Calkins, *1. IDEAS, Kirtland, Ohio, 2. IDEAS Institute, Kirtland, Ohio*

While there is greater understanding of the clinical benefits of private rooms in hospitals, less attention has been focused on the full range of potential outcomes of private rooms in nursing homes. This exploratory study used multiple qualitative methods to lay a foundation for more in-depth future research efforts. An analysis of literature, including research-based, expert opinion and anecdotal sources, was used to develop a preliminary framework and identify potential outcomes of private versus shared rooms. The framework suggested four broad domains impact a variety of outcomes: clinical, psychosocial, operational, and building construction costs. This was followed by focus groups held in a number of facilities, which particularly focused on areas where the research was thin or non-existent. Finally, a detailed construction cost analysis was conducted using 189 bedroom plans to assess differences and significance of construction cost differences between private and shared bedrooms.

PHOTO ELICITATION: PHOTOGRAPHY IN QUALITATIVE INTERVIEWING

H.L. Bell¹, H. Gibson¹, J. Singleton², *1. Tourism, Recreation and Sport Management, University of Florida, Gainesville, Florida, 2. Dalhousie University, Halifax, Nova Scotia, Canada*

Sometimes a picture is worth 1,000 words! This paper focuses on using photography to help research participants build positive rapport with the researcher and provide rich descriptions by eliciting memories and stimulating deep discussion (Harper, 2002). This paper provides an overview of the purpose and technique of photo elicitation, its advantages and areas that need to be enhanced. Collier (1967) identified this as an approach that can be used to gain further insights when understanding the participant's perception of an experience. Examples of studies that have used photo elicitation from a variety of academic fields are discussed. This protocol has different names in various fields of study, such as photo voice and visitor-employed photography. Confusion surrounding differing terminology is addressed. It is hoped that the paper generates ideas among the audience for future research with older individuals.

SESSION 1295 (POSTER)

SENIOR SERVICES AND EVALUATION

FOCUS GROUPS CONTRIBUTING TO DEVELOPMENT OF A SAFE DRIVING BEHAVIOR MEASURE

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Background: Older adults and caregivers may benefit from a self-report/proxy measure designed for accurate assessment of driving behaviors and safety. As part of a larger study, we developed a measurement tool, the Safe Driving Behavior Measure (SDBM), with older driver and caregiver/proxy versions. To further develop and refine the items, we conducted focus groups with the target populations. Methods: We held three focus groups (FG) with older drivers / family members from North Florida (FG2 & FG3) and Thunder Bay, Ontario (FG1) to generate safe driving behavior items and obtain SDBM feedback. FG1 and FG2 examined driving situations (e.g., left turn against traffic) and drivers'

responses (e.g., avoiding risky turns). FG3 reviewed the SDBM providing feedback on items (e.g., formatting or clarity) and the SDBM's relevance and utility. Focus groups were audio-recorded and transcribed verbatim for analysis using ATLAS.ti. Our team used content and thematic analyses, and an iterative review process, to code responses as those supporting existing items, those indicating item revisions (e.g., change wording), or those providing general feedback. Results: Findings from FG1 (n=6) and FG2 (n=14), supported the relevance and content validity for 46 of 72 SDBM items and generated 16 items based on 22 new themes. Findings from FG3 (n= 11) supported 40 SDBM items and suggested 13 item revisions. Conclusions: Respondents described their lived driving experiences. From their responses, we generated items that captured key driving behaviors, or revised items to improve the relevance, clarity, appearance, and utility of the self-report and proxy report SDBM.

MEASURING THE RESPONSIVENESS OF ALTERNATE TRANSPORTATION SERVICE PROVISION FOR SENIORS: A COMPARISON BETWEEN TRADITIONAL 'NOT-FOR-PROFIT' MODELS AND THE ITN AMERICA® MODEL

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Despite the well-recognized demand for alternate transportation for seniors, there is, overall, a paucity of literature in this area. Notably, there is a scarcity of literature on different models of alternate service provision for seniors, with a further dearth of empirical research investigating the responsiveness of different models in terms of service provision. To address that gap, we compared 'benchmarks' of alternate transportation for seniors (ATS) service provision between ATS service providers (primarily small, not-for-profit organizations) in a large metropolitan area in Canada (Edmonton, Alberta: 2006 Census population of 1,034,945) with that of the Independent Transportation Network (ITNAmerica®) model of ATS. The ITNAmerica® model is based on a social entrepreneurial approach which leverages public sector resources through collaboration with the private and not-for-profit sectors. All service providers were rated across 5 domains: Availability, acceptability, accessibility, adaptability, and affordability (identified as the 5 A's of Senior Transportation by the Beverly Foundation, 2001), using a standardized tool known as the 'Senior Friendliness Calculator' developed by the Beverly Foundation. Scores can range from 0 to 25 with higher scores representative of more 'senior friendly' alternate transportation. The mean score for service providers in Edmonton & Area (n = 33) was 11.15 (SD = 2.94) compared to a mean score of 23.00 (SD = 0) for two ITNAmerica® affiliates. Although the sample size is limited, the results are striking. Perhaps most notable is the difference in approach. The Edmonton area ATS providers rely primarily on a traditional approach that is dependent on the availability of resources and volunteer drivers, resulting in little flexibility in service. The ITNAmerica® approach, which utilizes technological advances and community involvement enterprises, allows for services that enable accommodation, on an individual level, of the desires and needs of the population served.

OLDER DRIVERS' COMFORT SCORES AND NATURALISTIC WINTER DRIVING BEHAVIOR

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Previously we demonstrated that older drivers' perceptions were strongly associated with driving exposure and patterns using in-vehicle recording devices. The purpose of this study was to extend the investigation to winter driving behavior. The Canadian sample consisted of 34 drivers (53% female), ranging in age from 65 to 91 (mean 77) who drove at least once a week during the study period (late November to

late February). Each person completed the Day and Night Driving Comfort (DCS) and Perceived Driving Abilities (PDA) Scales, ratings of typical driving habits, as well as activity trip logs. A data logger (CarChip®) and GPS unit were installed in their vehicle for a consecutive two week period. Archives were used to examine hours of daylight, snowfall and extreme temperatures. Consistent with prior findings on summer driving, DCS scores were significantly related to PDA scores ($p < .01$) and self-report measures of restriction: situational frequency and avoidance ($p < .001$). Similarly, frequency and avoidance scores were significantly related to total driving time and distance (km), as well as night driving (number of days, trips and duration). Comfort level (both day and night) was significantly associated with total driving time and distance (km), while nighttime comfort level was related to distance driven at night ($p < .01$). The findings provide further evidence that older drivers' perceptions play a key role in self-regulation. Daytime comfort scores were more strongly related to driving exposure than in prior (summer) studies, possibly due to having to deal with more adverse road conditions (snowfall and freezing rain).

DRIVING BEHAVIORS AMONG THE OLDER OLD AND OLDEST OLD

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The number of drivers over the age of 75 is increasing each year though our knowledge of driving behaviors for this population remains negligible. An anonymous, randomized survey was sent to 2850 older adults. The survey consisted of demographics, medical conditions, and a Driving Questionnaire for Driver respondents. 926 older adults responded (32.5%) including 680 (73.4%) Drivers. Drivers were significantly different from Non-Drivers ($p < .05$) on most demographic variables: age (80.2 yrs vs. 85.2 yrs); male (47.5% vs. 27.8%), married (59.9% vs. 41.2%), income of \$50,000 or higher (60.6% vs. 42.5%), college level education (56.0% vs. 38.1%) and medical conditions (1.8 vs. 2.4). In response to the Driving Questionnaire, 90% of the Drivers indicated a preference for driving themselves 3.6 days/week (sd = 1.8). Within this sample, 97.7% responded that driving was very important and 48.9% would be very upset if they couldn't drive. There is evidence of self-regulation of driving behaviors: (1) 40.4% no longer drive to distant towns; (2) 53.2% do not drive out of state; (3) 26.4% do not parallel park; and (4) 26.3% do not drive at night. About half of the sample thought that their driving ability could become a problem within 5 years (52.2%). However, less than half of the sample (43.9%) has given "some" and only 5.1% have given "a lot" of thought to stopping driving. Further study is needed to examine the self-regulation processes that lead to the decision to limit driving in the face of the importance of driving for older adults.

AGE-RELATED DIFFERENCES IN FUNCTIONAL SCANNING IN A SIMULATED DRIVING ENVIRONMENT

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Among physicians who evaluate older adult driver fitness, there is belief that older adults tend to reduce the degree to which they scan the environment when driving. This change in scanning behavior might lead to an increased risk of crashes in complex traffic situations. This study seeks to develop an objective evaluation in a simulated driving environment. After measuring functional axial rotation, visual acuity, and contrast sensitivity, differences in the scanning behavior/ability of older (N=33) and younger (N=10) adults were examined. Participants were asked to respond to the brake lights of a lead vehicle while reporting the locations of targets presented at 14 different locations along the horizon. Older adults' reaction time rose more rapidly as the target locations moved laterally from the forward field of view.

BEST PRACTICES IN MEDICAL REVIEW AMONG STATE AND PROVINCIAL DMVS

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This project compared all-inclusive medical evaluation forms utilized by 52 State and Provincial Departments of Motor Vehicles (DMVs) in the US and Canada. Forms were collected in Fall 2008. Comparisons focused length, format, content, instructional quality, medical coverage, ease of use, and other qualitative characteristics. Median page length was 2 (range 1-10), and mean word count was 1,083 (494-3,884). Common response options included open-ended (98%), forced choice (87%), and check box (81%). While the majority of forms (77%) required driver consent, only 24% requested other information from the driver. Less than half (46%) included text on confidentiality. While all forms requested general medical information, just a little more than half included a specific sections for vision (54%) and cognitive/neurological conditions (56%). Most forms (81%) required that a judgment be made concerning driver safety, and half prompted for possible license restrictions. Quality ratings were assigned on a 5-point Likert scale by group consensus. A full third of forms were rated as marginal or poor in overall comprehensiveness and utility, and just two garnered an excellent rating. Findings are discussed relative to current research on driver fitness and a model form for potential adoption. Best practice recommendations include a page length limitation, emphasis on in-person evaluation (i.e., as opposed to a records only review), prompts for driving history information, clear instructions and stepwise format, content prompts across relevant medical categories, options to record functional status and impairment levels, and emphasis on relative (vs. absolute) clinical judgments of overall driver safety.

WHAT FACTORS INFLUENCE THE RELATIONSHIP BETWEEN FEEDBACK ON COGNITIVE PERFORMANCE AND SUBSEQUENT DRIVING SELF-REGULATION?

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Older drivers may not be aware of sensory or cognitive deficits, and yet self-monitoring of such abilities is required for safe driving. Providing feedback regarding sensory or cognitive abilities could lead to changes in driving self-regulation. However, in a recent study, 42% of participants who received negative feedback (based on UFOV® test score) did not subsequently regulate their driving. These analyses examine moderators of the relationship between feedback regarding cognitive abilities and self-regulation. Participants included 131 older drivers (75-93) who took part in the Senior Driver Research Project. Participants received a discount on their auto insurance based on their UFOV® test performance, and were informed whether they had or had not qualified for the discount. Change in driving self-regulation over 3 months was measured with difference scores on a composite of self-reported avoidance of 7 challenging driving situations (i.e. driving at night, driving in bad weather) across baseline and a follow-up assessment. We investigated potential moderators of the association between this feedback and subsequent driving behavior, including age, gender, education, global cognitive status (TICS-M), depressive symptoms, personality (neuroticism) and baseline driving exposure (measured by z-score composite of self-reported days per week and miles per week driven). Younger participants were less likely to subsequently alter their avoidance of challenging driving conditions ($p = .031$). Participants with greater than median baseline driving exposure tended to be less likely to alter their subsequent driving habits ($p < .057$). These results have important implications for encouraging older adults to make informed decisions about appropriate driving behavior.

TAKING AWAY MY FREEDOM: EMOTIVE RESPONSES FROM IN-DEPTH INTERVIEWS WITH OLDER AND FORMER DRIVERS

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Reducing driving and, particularly stopping driving, is a stressful and even traumatic experience for many older adults, with adverse consequences for mental health and quality of life. This qualitative study used in-depth structured interviews to explore the circumstances associated with the process of driving reduction and cessation and attitudes and emotions associated with the transition from driving to not driving. Ten interviews (5 men, 5 women; 6 drivers, 4 former drivers; age range 65-88; recruited from Department of Motor Vehicle records) were conducted by trained interviewers. Qualitative analyses of verbatim transcripts resulted in several major themes — reluctance to stop driving, avoidance of particular traffic and weather conditions, perceived importance of driving for independence and convenience, unwillingness to acknowledge declining driving capability, lack of perceived risk to other motorists, and lack of preparation for the time they will no longer drive. Several highly emotionally charged stories about the importance of the ability to continue to drive are presented to illustrate the themes exemplified by statements such as “[driving cessation] locks you in a cage.” Participants who attend this session will better understand the range of attitudes and emotions associated with the common markers of the driving reduction and cessation process.

VISUAL ACUITY, VISUAL SPEED OF PROCESSING, AND PHYSICAL ACTIVITY IN THE OLDEST DRIVERS

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Normal age-related changes in visual acuity, visual speed of processing and physical activity have been related to the complex task of safe driving. 73 participants (M age = 82 years) in the Viva! Study on Successful Aging participated in a set of driving-related screenings using the Dagnelie Visual Screening Software (DVSS) that centered on: 1) visual acuity; 2) contrast sensitivity; and 3) visual fields. 54 participants (74%) self-identified as Drivers and also completed the Useful Field of View (UFOV™). Compared with Drivers, Non-Drivers were significantly older (86.5 years vs. 79.9 years, $p < .001$) and lived alone (86.7% vs 57.7%, $p = .021$). Physically, the Non-Drivers took fewer steps (2856 steps/day) at a moderate pace than Drivers (4254 steps/day; $p = .013$). Drivers had significantly better visual acuity (20/26) and contrast sensitivity (2.1%) in the better eye than Non-Drivers (acuity = 20/38, $p = .013$; contrast sensitivity = 3.7%; $p < .019$). 49.1% of the Drivers were placed in the UFOV categories of very low to low driving risk. The UFOV category was significantly correlated with balance ($r = .51$, $p = .007$); speed of walking ($r = -.36$, $p = .043$); total daily step count ($r = -.40$, $p = .030$); and high intensity walking ($r = -.37$, $p = .048$). In this study, older adults who are Drivers are younger and are more physically active than Non-Drivers. A relationship was found between the UFOV risk category and balance and walking activity. Further study is needed to examine the roles of visual acuity, processing speed, and physical activity in safe driving by the older-old and oldest old adults.

PREDICTORS OF DRIVING CESSATION IN OLDER ADULTS WITH VISION LOSS

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Driving and mobility have long been considered important factors influencing well-being among older adults. However, most prior studies have focused on demographic and medical factors associated with

driving cessation, and much of this work has been atheoretical. Therefore, this study uses a health behavior change model to examine psychological, social, and environmental factors that may influence driving cessation. From this theoretical perspective, a major barrier to behavior change (i.e., driving cessation) is the perception that the change would interfere with important goals. We use data from a larger, prospective, longitudinal study with participants interviewed at baseline and every six months for 2 years. All participants were 55 or older, driving, and experiencing vision problems at baseline. This paper presents findings from the first 200 participants for whom we have complete year 1 follow-up data. By year 1, 35 (17%) participants had stopped driving. After controlling for demographic variables, measured and subjective vision problems, health, and cognitive functioning, results of logistic regression showed providing rides to family and friends reduced the odds of driving cessation. In addition, as predicted by our theoretical model, higher perceived interference with important goals was associated with reduced odds of driving cessation. Receiving rides from family and friends and using more types of alternative transportation did not affect the odds of driving cessation. Implications for understanding driving transitions and for programming are discussed.

WHEN “MOM” WON’T HANG UP THE KEYS: DEVELOPING A GUIDE FOR FAMILIES IN CRISIS

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Families with older drivers are often hesitant to discuss driving retirement until a crisis situation requires immediate action. Resources are available in the literature and on the Internet, yet no single guide currently exists to help families in crisis consider the family dynamics involved, as well as the practical, legal, and ethical concerns that go into managing this situation effectively and responsibly. With the support of a 2009 Student Scholar Grant from the National Center on Senior Transportation, this project was initiated to develop a directive, evidence-based guide to address this need. The following steps were taken: (1) review of existing resources; (2) meeting with a panel of experts in the field of aging and mobility to obtain advice and guidance and; (3) piloting the guide with groups of older adults and their family members, with revisions to enhance clarity and utility. The guide is designed to provide a “reality check” for families in crisis, allowing them to step back, to assess current needs and risks, and to develop a collaborative plan for ongoing mobility. Included are specific concerns of individuals in rural environments and suggestions for professionals on how to use the guide. The poster will detail the development of this guide and its application in supportive care and public health settings.

TRAINING PHYSICIANS TO DISCUSS DRIVING FITNESS WITH OLDER ADULTS: IMPACT OF A WEB-BASED COURSE

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Background: Driving a personal vehicle is by far, the most preferred means of personal mobility. The number of older drivers is increasing and expected to double by 2030. Yet uncertainty about driving fitness is common. Healthcare providers are often asked to intervene but not trained to deal with driving issues in their patients. We investigated if provider knowledge and communication about driving safety could be improved via an interactive web-based continuing medical education course. The learning objectives were to: enhance knowledge of the epidemiology and predictors of crashes in older adults; describe the health, legal, social, and emotional factors related to driving cessation; and develop effective driving safety communication skills. Methods: A pre/post test design was used. 44 primary care physicians (mean age 42; 51% female; 79% non-Hispanic White; 84% Board Certified) participated in the study. To test knowledge acquisition, pre/post multiple choice questions were administered online. To assess improvement in com-

munication skills, pre and post interviews with different standardized patients were conducted, recorded, and analyzed. Results: Paired t-tests were used to compare pre-test and post-test scores. There was a significant increase in post-test knowledge scores of 13.3 points ($p < 0.001$) and significant gains in general communication behaviors (6 points, $p < 0.001$) and communication related to driving safety (6.7 points, $p < 0.001$). Half of the physicians reported that, as a result of training, they would incorporate assessment of driving safety in routine visits. Conclusions: Web-based instruction is effective in improving provider skills to address driving safety issues. Supported by NIA grant #R44AG23366.

OLDER ADULTS' DRIVING REDUCTION AND CESSATION: IMPLICATIONS FOR ADULT CHILDREN

C.M. Connell¹, D.K. Robling¹, L. Kostyniuk², M. Janevic¹, 1. *Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor, Michigan*, 2. *University of Michigan Transportation Research Institute, Ann Arbor, Michigan*

With the aging of our population, increasing numbers of older adults will need to limit and stop driving, despite a strong preference to continue. For many families, this transition places additional burden on adult children who play an informal caregiving role for their parents. This qualitative study examined the process of driving reduction and cessation from the perspectives of older adults and their adult children. Twelve focus group interviews were conducted; 4 each with groups of older drivers, former drivers, and adult children; the number of participants averaged 9 per group. Structured interview protocols were used to assess changes in driving, perceived risk of driving, the process of cessation, and the impact of cessation on adult children. Among the barriers to driving reduction and cessation that emerged were two related themes — reluctance on the part of older adults to increase the burden on their children; reluctance on the part of children to initiate the role of caregiver by assuming responsibility for transportation. Participants attending this activity will better understand the complex and interrelated family dynamics that shape decision making about when older adults' should limit or stop driving and how much and what type of support adult children can provide during this transition.

SOCIAL SERVICE PROVIDERS: WHAT ARE THEIR PERSPECTIVES ON DISORDERED GAMBLING AMONG SENIOR CITIZENS

K.L. Stansbury, D.R. Davis, S.R. Allen, *School of Social Work and Human Services, Eastern Washington University, Cheney, Washington*

The purpose of this study was threefold: a) determine if social service providers have observed an increase in problem gambling in older adults; b) explore what types of specific gambling-related problems have been brought to social service providers; and 3) examine whether social service providers and/or their clients have received training on disordered gambling. Using a cross-sectional survey design, questionnaires were mailed to social service providers who provide services to adults 60 and over. Of the 210 social service providers contacted, 73(35%) returned completed questionnaires. The questionnaire covered six areas: social service providers' demographics, agency-sponsored trips to casinos, reasons older adults engage in casino gambling, prevalence of gambling addiction, and training. Descriptive statistics were used to summarize findings. Descriptive analyses revealed that one-third of social service providers sponsor monthly trips to casinos. Over ninety percent had not encountered an older adult with gambling problems. Of the few who reported an encounter, it generally involved a client's family member experiencing problems with gambling. More than three-fourths had not received training on screening, treating, or educating their clients about disordered gambling. Only one-third of respondents were interested in receiving training on disordered gambling. The most common reason offered for lack of interest in training was that problem gambling is not a concern for their clients. Findings from this study indicate that

social service providers do not believe disordered gambling is a major concern for their clients. However, disordered gambling is a "silent addiction" and social service providers may underestimate the problem.

A STUDY OF THE OUTPATIENT MEDICAL SERVICE QUALITY TO THE ELDER PATIENTS' SATISFACTION

S. Huang, *Chang Jung Christian University, Tainan, Taiwan*

In this research, we build a multi-level model for evaluating the medical services quality in the view point of the patients and their companies, based on both the theorem "structure-process-outcome" from Donabedian in 1980, and on the documents relating to the models of services quality measurements and medical services quality measurements. We select outpatients for exploratory factor analysis at random to get the service factors. The questions included three types: medical service structure, medical service process, and medical service outcome. Some factors are extracted by using exploratory factor analysis. These factors are treated as the indexes of the medical service quality. This research differs from those using a single-dimensional method. According to the verification of this model, the measurements of the medical service quality are multi-layers and multi-dimensional, including the medical technologies, the medical art, the environment and the results. In fact, many hospitals in Taiwan use the THIS (Taiwan Healthcare Indicator Series) to compare the service quality, but forget the real feelings of the customers about the service quality. This research shows that not only emphasizing on the technical skill, hardware facilities does interest the elder in the aspect of the service quality, but also paying more care, more attentive to the patients does improve the elder patient's satisfaction. This model provides a systematic measurement to evaluate the importance of medical service quality indexes, which may have different point of view between the customers and the hospitals.

HUMAN RESOURCES AND SERVICE UTILIZATION OF OLDER PEOPLE AFFECTED FLOOD DISASTERS; A COMPARISON OF YOUNG-OLD AND OLDER-OLD

S. Chong, G. Kim, B. Oh, J. Kim, J. Moon, *Ewha Womans University, Seoul, Korea, South*

This study was intended to observe the human resources and service utilization of the elderly who affected by flood disasters in Gangwon province, Korea and to suggest the ways to support them. A total of 184 elderly people aged 60 and over who were directly or indirectly damaged by flood disasters of 2006 in Gangwon province, Korea were selected for the study subject. For the comparison, entire elderly subjects were divided into two parts by age 75; young-old and older-old. According to the study results, in human service utilization, a statistically significant difference was found between them. In other words, although young-old are more likely to use informal human resources such as friends and relatives than older-old, older-old are more likely to depend on formal human resources like military officers and volunteers in disaster situations. In service utilization, there was no statistical difference in used services and services supposed to be used in the future between them, however, a statistically significant difference was found in life saving. Older-old are more likely to use life saving services than young-old. Although entire elderly, in used services, have used services like basic life supplies and medical care or medicine, they, in services supposed to be used in the future, wanted to use services like family news service concerning their safety, accurate information, and psychological stability. In conclusion, older-old should be considered as most vulnerable group to use human resources and services and age-based approach is necessary to take measures in resource utilization.

THE EFFECTIVENESS OF THE SERPER METHOD™: A COGNITIVE STIMULATION FOR PERSONS WITH MILD TO MODERATE DEMENTIA

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Researchers and practitioners increasingly recognize the potential benefits of stimulating, meaningful activities for those with cognitive impairment. This evaluation study assessed the effectiveness of The Serper Method™, a cognitive stimulation program for persons with dementia. We documented participant outcomes and assessed the feasibility of implementing the intervention in three long term care settings. We hypothesized that the intervention group would demonstrate maintenance or improvement in cognitive function using the MMSE and the Nexade© exam, as well as improvements in self-reported quality of life and self esteem. Thirty-five individuals with mild to moderate cognitive impairment were assigned to either an intervention or a waiting-list comparison group. Intervention participants attended two 1 ½ hour Serper Method™ study groups twice a week for 24 weeks. Outcomes were assessed at baseline, three months, and six months; the intervention group was also assessed two months after the end of the intervention. For the 30 participants who completed the study at six months, the intervention group (n=18) but not the comparison group (n=12) demonstrated statistically significant improvements in several domains of cognitive function on the Nexade© exam, including: sustained attention, visuospatial learning, short-term memory, executive function, and mental flexibility. Gains in cognitive function were retained at eight months for the intervention group. Results suggest that three months may be an insufficient dose of the intervention. While there were no significant changes in other outcomes and no between group differences, site staff reported behavioral changes in intervention group participants that confirm findings regarding gains in cognitive function.

WHERE HAVE WE BEEN AND WHERE ARE WE GOING? CONTENT ANALYSIS OF NON-FAMILIAL INTERGENERATIONAL RESEARCH

S.E. Jarrott, A.P. Weintraub, *Human Development (0416)*, Virginia Tech, Blacksburg, Virginia

Human services providers increasingly turn to intergenerational programs to meet client and community needs. Intergenerational programs, which purposefully engage youth and elders for mutual benefit, include tutoring for immigrant elders and respite for parents of disabled children. Intergenerational scholars frequently note a dearth of theoretical grounding and psychometrically sound instruments in the literature. We conducted a content analysis of journal articles addressing non-familial intergenerational relationships to depict the field, discover research methodology trends, and identify new questions to explore. We analyzed 220 peer-reviewed articles in research databases. Most were research studies (66%) or program descriptions (26%). For each research article, we coded the theoretical foundation, sample and methodological characteristics, and findings. Nearly 50% were atheoretical. Most involved well elders (82%) and youth ages 11+ (58%); children's experiences were more commonly measured (86%) than elders. Sample sizes were typically less than 25 persons; other stakeholders were rarely assessed. Pre-post analyses of children's attitudes towards aging were the most commonly analyzed outcomes, typically revealing benefits of contact. Intergenerational research can improve by specifying theoretical bases, including multiple stakeholders, and moving beyond attitudinal measures. Because intergenerational programs often serve small groups of participants, research can improve by gathering more points of data, adding to the sample with data on subsequent cohorts, and following participants beyond the intervention period. Such studies were identified and must become prevalent if intergenerational practices and outcomes are to be optimized. Session participants will comprehend the

state of intergenerational programming research and consider next steps to advance the field.

RE-THINKING ELDER NEEDS THROUGH INTERPRETIVE NEEDS ASSESSMENT: A CASE FOR IMAGE-DRIVEN RESEARCH

E. Kearns, V. Parker Callahan, D. Collier, A. Miller, D.W. Scott, R. Pennellatore, *Greater Lynn Senior Services, Lynn, Massachusetts*

This paper examines the impact of an image-driven methodology on the assessment of elder needs. Informed by critical gerontology and conducted by Greater Lynn Senior Services to fulfill its mandate of delivering optimal social and health service support choices to more than 30,000 elders residing in its catchment area, the assessment aims to: avoid "expert" presuppositions and pre-determined answers, invite discourse around what may actually be occurring, and deconstruct existing categories of analyses. Describing an ongoing elder needs assessment process, the authors present an interpretivist approach that enhances community dialogue and informs policy decisions around resource allocation and service delivery. Central to the methodology are image-driven focus groups that: include community participants often ignored or under-represented by traditional needs assessment methodologies, break from traditional survey-based processes that frequently present pre-determined needs for ratification, and eschew conventional focus group approach of generating topic guides from pre-determined themes. Rather, initiating discussion around diverse images of elders in daily situations and asking participants what they see captures greater diversity and nuance, transfers control from "provider-expert" to the community, and allows the multiple realities of the aging experience to emerge more fully. Preliminary findings indicate consumer needs emerge that traditional assessments missed. Participants identify various emotional and social needs as priorities that may trump a medical model's depiction of physical health as the dominant aging need. Participants in this paper session will be introduced to a realistic alternative model for needs assessment consonant with the time and resource constraints commonly faced by non-profit organizations.

A PRELIMINARY LOOK AT MEDICARE D: SENIORS LEVEL OF SATISFACTION

M.M. Newton, *Sociology and Social Work, Jacksonville State University, Jacksonville, Alabama*

Medicare Part D is the voluntary prescription drug benefit offered by the federal government/Medicare through individual prescription drug plans. The Centers for Medicare and Medicaid Services reported that as a result of the complexity of the plan and the multitude of options available, there were initial start-up problems in early 2006. Several of these problems included extended telephone wait time for potential enrollees, inadequate plan information for pharmacies, transition problems for dual-enrollees (Medicare and Medicaid), and overall program confusion (Bach & McClellan, 2006). This paper presentation is a discussion of a pilot research project conducted in small communities of mid-east Alabama over a two year period from 2006, year of Medicare D full implementation, through spring 2008. The research involved collecting data on knowledge of and satisfaction with the new Medicare D prescription drug benefit. The current data support early findings that the majority of Medicare PDP enrollees are currently satisfied with their new prescription drug coverage and it also illuminates areas of future concern, including: gender differences, differences in beneficiaries with greater need for prescription drugs, Prescription Drug Plan differences/changes, policy revisions/program changes, and the impact of the "doughnut hole" on enrollee satisfaction. After attending this session, participants will be able to define factors related to consumer satisfaction with the federal Medicare D prescription drug benefit, including potential concerns that may need to be addressed regarding social policy and direct practice with seniors and their families.

AN ASSESSMENT FOR THE NEED OF SENIOR SERVICES IN MAHONING COUNTY OHIO: HOW DO WE GET A LEVY PASSED?

J.L. Iudicani, D.J. Van Dussen, *Youngstown State University, Youngstown, Ohio*

The purpose of this study was to assess the need for senior service programs in Mahoning County Ohio to gain further insight for a future senior service levy. In this study, a senior services needs assessment survey was given to determine the types of programs needed, funding levels of the programs, the need for funding of new services, and new program development. The research was conducted in conjunction with the Area Agency on Aging Chapter 11, Alzheimer's Association Greater East Ohio Chapter, Hands on Volunteer Network of the Valley and Youngstown State University. The survey was completed by a systematic sample of registered voters in Mahoning County. Paper and pencil surveys of 297 registered voters in Mahoning County were collected between December 2008 and March 2009. The results indicate the mean age of respondents is 59 and 61.8 percent of the respondents are female. The three most commonly suggested senior programs of importance to the voters are prescription drug assistance programs, emergency response systems, and caregiver services. Bivariate analysis indicated a significant correlation between prescription drug assistance programs and gender. Results indicate that voters are unaware of the services available to them. The next step may include a public awareness campaign of senior issues and planning for a future levy.

SESSION 1300 (SYMPOSIUM)

THE HOSPICE CAREGIVING EXPERIENCE: EXPLORING THE TRAJECTORY OF CAREGIVING

Chair: *G. Demiris, University of Washington, Seattle, Washington*

Discussant: *E. Wittenberg-Lyles, University of North Texas, Denton, Texas*

Family members, friends, spouses or others who assume the informal caregiving role are essential to the delivery of hospice services to patients at the end of life. The caregiving role does affect caregivers' own mortality. Informal caregivers often struggle with the physical and psychological demands of caregiving and their own needs often are not addressed. The hospice philosophy is based on the notion that both the patient and the informal caregiver constitute the unit of care. The ACT (Assessing Caregivers for Team Interventions) promotes the holistic assessment of caregivers' needs and stressors and the design of individualized interventions that are to be delivered by the hospice interdisciplinary teams. This symposium provides an insight into the complexity of the caregiving role and demonstrates how the history of the caregiver-patient relationship, caregivers' occupational and personal health histories, previous caregiving experience and support affect the strategies and approaches caregivers adopt during the hospice experience. Furthermore, it includes the presentation of a problem solving intervention delivered to hospice caregivers aiming to increase their problem solving skills, improve caregiver quality of life and reduce anxiety. Finally, the symposium also covers the last stage of caregiving, namely bereavement, where caregivers deal with grief and loss and are still in need of personalized cognitive behavioral interventions.

ASSESSING CAREGIVER NEEDS IN HOSPICE: A PROBLEM SOLVING INTERVENTION

G. Demiris, University of Washington, Seattle, Washington

Informal caregivers of hospice patients often face several challenges as they take care of a loved one at the end of life. A problem solving intervention can support caregivers as they cope with the tasks and challenges of caregiving and allow them to develop strategies to prioritize and address issues. We present the findings of a pilot study funded by the National Institutes of Health that examines the delivery of a problem solving intervention to hospice caregivers and explores its delivery both in person and using videophone technology. Outcomes include

caregiver anxiety, quality of life and problem solving inventory. Findings indicate the value of problem solving tools for hospice caregivers and the need for further interventions that target hospice caregivers.

EXAMINING THE PAST: FACTORS AFFECTING HOSPICE CAREGIVERS' STRATEGIES AND ATTITUDES

K. Washington, University of Louisville, Louisville, Kentucky

Individuals receiving home-based hospice services often rely upon family members and friends to serve as informal caregivers responsible for managing emotional, psychological, spiritual, and physical pain. The purpose of this in-depth, grounded theory study was to generate a model describing how psychosocial factors influence informal hospice caregivers' management of pain. Findings revealed that caregivers' pain management strategies are influenced by the history of the caregiver-patient relationship, caregivers' occupational and personal health histories, previous caregiving experiences, caregivers' individual personalities, support from others, and competing demands. Findings support the inclusion of informal caregivers in thorough psychosocial assessments conducted by hospice social workers in an effort to maximize the potential for effective pain and symptom management.

SUPPORTING CAREGIVERS IN THE BEREAVEMENT PHASE

D. Parker Oliver, Family and Community Medicine, University of Missouri, Columbia, Missouri

In addition to existing interventions for hospice caregivers who are taking care of a loved one, hospice services should address caregiver needs in the bereavement phase. During that phase, caregivers struggle with loss and grief as well as practical issues that often require immediate response. This presentation demonstrates the adoption of the problem solving intervention described earlier to address caregiver needs in the bereavement phase, where caregivers no longer struggle with the physical demands or practicalities of caregiving but have to face several challenging aspects as they go through bereavement. The presentation demonstrates how the ACT framework (Assessing Caregivers for Team Interventions) can be applied to assist caregivers during the bereavement phase.

SESSION 1305 (SYMPOSIUM)

THE IMPACT OF SPOUSAL BEREAVEMENT ON LATE LIFE HEALTH: NEW DIRECTIONS IN THEORY, RESEARCH, AND PRACTICE

Chair: *D. Carr, Rutgers University, New Brunswick, New Jersey*

Discussant: *J. Ha, University of Chicago, Chicago, Illinois*

The death of one's spouse in later life is typically accompanied by at least short-term symptoms of depression, anxiety, and some physical health symptoms. However, widow(er)s reveal tremendous heterogeneity in the type, time course, and intensity of symptoms. The five papers in this panel explore the factors associated with physical and emotional adaptation to loss, and identify potential paths to treatment. Utz, Lund, Caserta, & deVries track the physical health symptoms at 2, 6, and 16 months among the 329 bereaved persons who participated in the "Living After Loss" (LAL) study. Richardson, Carr, Bennett & Gallagher use data from the Changing Lives of Older Couples (CLOC) study to explore the short-term effects of spousal loss on a range of biomarker indicators, including inflammatory markers. de Vries, Lund, Caserta & Utz use data from the LAL study to explore the protective effects of social support in early widowhood. Carr & Sharp examine the extent to which beliefs in the afterlife protect against grief symptoms and yearning among participants in the CLOC study. Shear, Guesquire, Fox, Alston & Kishon investigate the effects of a targeted psychosocial intervention for bereaved persons suffering from complicated grief. Implications for policy and practice are highlighted.

THE HEALTH AND HEALTH BEHAVIORS OF THE BEREAVED

R.L. Utz¹, D. Lund³, B. De Vries², M. Caserta¹, 1. *University of Utah, Salt Lake City, Utah*, 2. *San Francisco State University, San Francisco, California*, 3. *California State University San Bernardino, San Bernardino, California*

This presentation focuses on the physical health symptoms and health behaviors among recently bereaved older adults (2 to 6 months post-loss). It also explores the relationship between physical and mental health over the course of bereavement (up to 16 months post-loss). Drawing on the experiences of 329 bereaved persons who participated in the "Living After Loss" (LAL) study, we first documented common physical symptoms and reported health behaviors that may be related to grief. We then explored the strong and consistent positive correlation between reported health symptoms and measures of grief and depression; these relationships persisted over the course of bereavement, but the lagged effect of prior physical health predicting future mental health, and vice versa mental health predicting physical health, was less clear. Our results remind us that bereavement is a multi-faceted experience that involves both physical and mental health adjustment.

HOW DOES WIDOWHOOD GET UNDER ONE'S SKIN?: AN EXPLORATION OF BIOMARKER RESPONSES

V.E. Richardson¹, D. Carr², K.M. Bennett³, S. Gallagher⁴, 1. *The Ohio State University, Columbus, Ohio*, 2. *Rutgers University, New Brunswick, New Jersey*, 3. *University of Liverpool, Liverpool, United Kingdom*, 4. *Staffordshire University, Staffordshire, United Kingdom*

We use data from the Changing Lives of Older Couples (CLOC) study to investigate whether the experience of spousal loss and specific grief symptoms are associated with physiological responses, as measured with biomarker indicators including epinephrine, norepinephrine, and cortisol levels. We compared widowed persons with matched married controls, and also explored heterogeneity among the bereaved subsample. We found no significant differences between widowed persons and matched controls with respect to the biological outcomes. However, among the bereaved-only sample we found that those involved with extensive caregiving evidenced high cortisol and epinephrine levels especially at Wave 2. Bereaved persons who experienced sudden deaths and high levels of numbness also revealed heightened cortisol levels. Some circumstances evoke physiological reactions soon after the death while others emerge later. Our results suggest the need for greater attention to biological responses during bereavement and to interventions that might prevent or reduce these potential adverse reactions.

SOCIAL SUPPORT IN EARLY WIDOWHOOD

B. De Vries¹, D. Lund², M. Caserta³, R. Utz³, 1. *San Francisco State University, San Francisco, California*, 2. *California State University, San Bernardino, California*, 3. *University of Utah, Salt Lake City, Utah*

This study explored the relative contributions of friends and family to the lives and welfare of women and men in the first two to six months following the death of their spouse or partner. Three hundred and twenty-nine widowed men (39%) and women age 50 and older completed a self-administered questionnaire that included measures of contact and satisfaction with friends and family as well as measures of coping and psycho-emotional well-being. Regression analyses revealed that satisfaction with friendship support was associated with lower grief and higher self-esteem, and satisfaction with both friend and family support was associated with higher mastery and lower depression and loneliness. These analyses further articulate the role of social support in bolstering individuals during stressful life transitions and advance our understanding of the under-examined and particularly distinct functions of friendship in the early phases of spousal loss. (Funded by the National Institute on Aging R01 AG023090) 90)

DO BELIEFS IN THE AFTERLIFE PROTECT AGAINST BEREAVEMENT-RELATED DISTRESS?

D. Carr¹, S. Sharp², 1. *Rutgers University, New Brunswick, New Jersey*, 2. *University of Wisconsin, Madison, Wisconsin*

Recent theory suggests that maintaining "continuing bonds" with one's deceased spouse is associated with better psychological adjustment to loss. One strategy for maintaining such bonds is to subscribe to the belief in the afterlife, and the belief that loved ones are ultimately reunited in the afterlife. We use data from the Changing Lives of Older Couples (CLOC) study to explore whether such beliefs are associated with better psychological adjustment to loss. We find that general beliefs in the afterlife are not associated with depressive symptoms among the bereaved, yet among married match controls, persons who "do not know" whether an afterlife exists report significantly elevated depressive symptoms. Our results suggest that existential doubts among older married persons may make it difficult to face impending loss. However, in the early stages of bereavement, the belief that one will be reunited with the decedent does not provide protection against depressive symptoms.

COMPLICATED GRIEF AND ITS TREATMENT IN OLDER ADULT WIDOWS

K. Shear, *School of Social Work, Columbia University, New York, New York*

Complicated grief is a recently identified prolonged grief reaction that causes significant distress and impairment. Estimated prevalence of this condition among older widows is about 10%. We developed a targeted psychosocial intervention for people suffering from CG and are currently testing it in an NIMH study of older adults. This presentation will present baseline data for older widows regarding demographic information, number of previous losses and associated symptoms of sleep disturbance, disruption in daily activities, functional impairment and levels of hope. We will describe the treatment approach using a vignette of an older widow to illustrate how this works.

SESSION 1310 (SYMPOSIUM)

THE USC WELL ELDERLY STUDY II: BROAD-BASED IMPLICATIONS FOR FUTURE GERONTOLOGICAL RESEARCH

Chair: *F. Clark, Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, California*

Discussant: *S.M. Stahl, National Institute on Aging/NIH, Bethesda, Maryland*

In 1997 our investigative team completed the USC Well Elderly Study (Well Elderly I), a randomized clinical trial that demonstrated the efficacy of a comprehensive individualized lifestyle intervention in slowing down age-related declines among independently living adults. As the next step in our research program, Well Elderly II was undertaken to go beyond Well Elderly I, an efficacy study, to test the intervention's effectiveness under less favorable conditions for maximizing effect size, but delivered in more natural, real world circumstances. A second aim of Well Elderly II was to investigate longitudinally the mediating mechanisms that account for the intervention's positive effects. In Well Elderly II, an initial sample of 460 subjects was repeatedly assessed at 6 month intervals over an 18 (treatment group) or 24 (control group) month period on measures of meaningful activity, perceived control, social support, stress-related biomarkers, cognitive functioning, depression, life satisfaction, and physical and mental health. Not only did this study enable analyses of intervention outcomes and their mediating mechanisms, but it also made available an exceptionally rich data set for investigating a wide range of methodological and theoretical issues pertinent to gerontological research. In this panel we will present the findings of a series of studies which collectively address factors that influence outcomes in gerontological clinical trial research. These topics concern the recruitment and retention of ethnic minorities in RCTs, the role

of mediators in linking interventions to targeted benefits, the measurement and conceptual role of biomarkers, and problems of reverse-coded items in self-administered assessments

MEASUREMENT DIFFICULTIES AND CORRECTION PROCEDURES ON REVERSE SCORED ITEMS FOR OLDER ADULT RESPONDENTS

M. Carlson, R. Wilcox, *Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, California*

Reverse-coded items contained on assessment scales potentially create measurement problems for older adult respondents. Using data from a clinical trial involving 460 multi-ethnic older adults, we hypothesized that the reversed items on the Center for Epidemiologic Studies Depression Scale (CES-D): are less reliable than non-reversed items; disproportionately lead to intra-individually atypical responses; and induce atypical responses more frequently among elders more likely to have information processing difficulties. The results supported these expectations. Relative to non-reversed CES-D items, the four reversed items were less internally consistent, exhibited low item-scale correlations, and were more often answered atypically especially by elders who were male, less educated, or had lower cognitive functioning. Additionally, the use of imputation to replace atypical responses enhanced the predictive validity of the set of reverse-scored items. We conclude that reverse-scored items induce measurement difficulties among older adult respondents, and that the application of correction procedures can reduce such difficulties.

A BIOSOCIAL MODEL OF HEALTH AND WELL-BEING DERIVED FROM WELL ELDERLY II

B. Cherry¹, D.A. Granger², D. Mandel³, 1. *Psychology, California State University, Fullerton, Fullerton, California*, 2. *Pennsylvania State University, University Park, Pennsylvania*, 3. *University of Southern California, Los Angeles, California*

A minimally invasive and multi-system measurement approach (using salivary analytes) was used to examine associations between the psychobiology of the stress response and physical health, psychosocial well-being, and cognitive functioning in a large ($n = 206$; ages 60 to 94 years; 64% female) ethnically diverse sample of well older adults. Test sessions at senior centers/residence facilities were conducted during which assessments of health, well-being, cognitive functioning, activity, social support, coping and perceived control were obtained. On a subsequent day, saliva was collected at each individual's home upon waking, 30 minutes post-waking, midday, and in the early evening and assayed for cortisol, DHEA, and alpha-amylase (sAA). Structural equation models confirmed associations between individual differences in the cortisol awakening response and health and well-being, as well as moderation of these effects by DHEA and sAA. The results will be discussed with respect to advancing biosocial models of health and well-being.

RECRUITMENT AND RETENTION OF OLDER ETHNIC MINORITIES

J. Jackson, D. Mandel, J. Blanchard, *Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, California*

Recruiting and retaining minority older adults as study participants is critical in attempting to address health disparities through scientific research. Using strategies identified by the Resource Centers on Minority Aging Research, 460 ethnically heterogeneous older adults (32% African American, 20% Hispanic, 37% white, and 11% other or unspecified) were recruited for participation the Well Elderly II clinical trial. Overall, study retention was 78% and 67% at 6 and 12 months, respectively. Although retention rates did not differ between the three main ethnic groups, the predictors of retention varied among the groups. African Americans who were female or more active, Hispanics with compromised physical health, and Whites who were less depressed were

more likely to continue study participation (all p 's $< .05$). The results are discussed relative to RCMAR guidelines for improving minority recruitment and retention in health care research.

MEDIATING MECHANISMS OF THE WELL ELDERLY II INTERVENTION EFFECTS

C. Chou¹, F. Clark², 1. *Institute For Prevention Research, University of Southern California, Alhambra, California*, 2. *University of Southern California, Los Angeles, California*

A key purpose of the Well Elderly II study was to document the mediating mechanisms that link broad-based lifestyle interventions to positive outcomes in older adults. Using baseline and posttest data from a clinical trial involving 460 ethnically diverse elders, we tested the hypothesis that the intervention increases healthy activity, active coping, and social support, which in turn lead to enhanced physical health, psychosocial well-being, and cognitive functioning. To assess this hypothesis, structural equation modeling was used to evaluate both the direct effect of the intervention on outcomes and the indirect effect of the intervention on outcomes through the proposed mediators. The results indicated that the intervention's positive effects were mediated through healthy activity, but not active coping or social support. This result is discussed in terms of its implications for basic theory as well as for the development of enhanced lifestyle interventions for older adults.

FACTORS THAT IMPACTED EFFECT SIZE IN THE WELL ELDERLY II CLINICAL TRIAL

F. Clark, M. Carlson, *Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, California*

The USC Well Elderly Study (Well Elderly I) demonstrated that, under favorable research conditions, a lifestyle intervention can forestall declines associated with aging and in some domains lead to positive gains in health or well-being. Moving beyond this prior result, which demonstrated the intervention's efficacy, a second trial (Well Elderly II) was conducted to test the intervention's effectiveness rather than efficacy through the incorporation of the following design features: 1) expansion of the number and type of sites from two locations with considerable agency "buy-in" to twenty-one with varying degrees of administrative investment; 2) a shortened treatment duration; and 3) sampling of more elders at highest risk for health disparities. Results of the intent-to-treat analysis demonstrated a diminished intervention effect for Well Elderly II relative to Well Elderly I. In this paper, we present an analysis of the set of factors that were identified as significantly related to effect size.

SESSION 1315 (SYMPOSIUM)

TRANSLATING COMMON-SENSE MODEL THEORY TO PRIMARY CARE PRACTICE

Chair: E.L. Idler, *Institute for Health, Rutgers University, New Brunswick, New Jersey*

Discussant: H. Leventhal, *Institute for Health, Rutgers University, New Brunswick, New Jersey*

The prevalence of chronic disease in older populations continues to grow, and with it, the need for patients' expert self-management of often complicated treatments. Physicians and patients must communicate effectively to establish and maintain such practices. The session will provide an overview of the Common-Sense Model approach to understanding physician-patient interactions in primary care – the extent to which they agree on the identity, cause, duration, consequences, and control of the presenting problem. The PProcesses of Illness Management (PRIM) Study and the Asthma Providers Study seek to understand patients' common-sense models of illness, physicians' efforts to take the patient's point of view, and the integration of common-sense models with effective action plans to help patients manage their acute and chronic illnesses successfully. PRIM primary care patients ($N=378$) were inter-

viewed and followed for one month; PRIM physicians completed questionnaires, and audio-recorded visits. Asthma providers (N=197 physicians) were interviewed to determine compliance with national practice guidelines. In the first of four papers, E. Leventhal reviews research on the Common-Sense Model and its application in primary care practice. Idler presents research on the use of global self-ratings of health in clinical settings, comparing physicians' and patients' ratings. Phillips discusses the factors affecting physicians' perceptions of patients' models of both illness and treatment. Musumeci-Szabó reports on the ability of physicians to effectively demonstrate inhaler use to asthma patients and their adherence to national practice guidelines. Finally, H. Leventhal draws the links between theory, research, and practice in this critically cost-sensitive area of chronic illness management.

TRANSLATING THE CSM THEORY INTO PRACTICE: INSIDE THE CLINIC: HOW TO DO AND TEACH IT

E.A. Leventhal, *1. Rutgers University, New Brunswick, New Jersey, 2. University of Medicine and Dentistry of New Jersey, New Brunswick, New Jersey*

Medicine's basic goal is to help patients maintain optimal health and functional independence. Effective management of chronic conditions that are inevitable with advancing age depends upon the congruence between the patient's Common Sense (CS) perceptions and beliefs and the bio-medical condition. The clinician's challenge is to perceive and connect the patient's CS perceptions to a framework that more closely reflects biomedical realities. Effective management requires motivation and skills to adhere to practices targeting objective outcomes; e.g., blood pressure and blood glucose. Good psychosocial relationships with patients form a context for acquiring the perceptual and instrumental skills for effective self management but are insufficient to achieve objective outcomes that will reduce the costs of unneeded office and emergency room visits and the risks to patients of unnecessary hospitalizations. Improving management of chronic illness requires minimal change in provider behavior and can be taught to future providers.

PATIENT-PHYSICIAN AGREEMENT ON GLOBAL RATINGS OF HEALTH: MORE PERCEIVED THAN REAL?

E.L. Idler, *Institute for Health, Rutgers University, New Brunswick, New Jersey*

The patient's health is an object of concern to both physician and patient. Physician visit interactions about specific problems take place in the context of global evaluations of health on the part of both actors. A theory of mind approach examines how well patients and physicians agree on overall ratings of health, and how well they perceive the other's point of view. PRIM data on patients' self-rated health, patients' views of how the physician sees their health, physicians' ratings of patients' health, and physicians' views of how patients see their health are compared. Patient and physician ratings are identical only 38 percent of the time. Patients perceive their doctors to share their rating 62 percent of the time, but they are correct only 40 percent of the time. Physicians perceive that patients share their rating 70 percent of the time but are correct only 47 percent of the time.

THOSE WHO CAN, DO NOT TEACH: RECOGNIZING AND CAPITALIZING ON TEACHABLE MOMENTS IN MEDICAL ENCOUNTERS

T.J. Musumeci-Szabó¹, L.A. Phillips¹, J.P. Wisnivesky², E.A. Halm³, H. Leventhal¹, *1. Rutgers University, New Brunswick, New Jersey, 2. Mt. Sinai School of Medicine, New York, New York, 3. Univ. of Texas SW Medical Center, Dallas, Texas*

Asthma in adults requires sophisticated self-management. While inhaler technique is a vital component of asthma management, studies suggest proper technique needs to be taught – to both patients and physicians. This study used quantitative and qualitative data to describe how and when physicians demonstrate inhaler technique in office visits,

and to examine factors associated with optimal inhaler technique. In five general-medicine practices, we administered survey interviews to determine physician's application of national treatment guidelines and ability to demonstrate proper inhaler technique. Among 197 physicians, training level ranged from first-year resident to attending (residents=78.7%). Consistent with prior research, no association was found between physician training level and proper technique; on average, physicians correctly performed five of seven steps. Skilled physicians were as likely as unskilled to ask to observe a patient's technique. Intervention is needed, as demonstrating inhaler technique represents a unique opportunity to impact patients' models of asthma and its treatment.

SHARED PHYSICIAN AND PATIENT COMMONSENSE MODELS: REQUIRED FOR SUCCESSFUL INTERVENTIONS

L. Phillips, H. Leventhal, *Institute for Health, Rutgers University, New Brunswick, New Jersey*

Patients hold commonsense models of illness—beliefs about illness/treatment labels, symptoms, causes, consequences, timeline, and control of the problem and its treatment. How well a physician addresses the patient's model has been shown to predict adherence and outcomes. To know when a patient's model needs to be addressed, a physician must be able to perceive when there is disagreement between the patient's model and what the physician is diagnosing and prescribing. The current, longitudinal study assessed the accuracy of physician-perceptions of disagreement between the patient's and the medical model. The sample included 402 primary-care patients of 34 physicians. It was hypothesized and found that the same ability that allows physicians to address patient-models is related to how well they can detect disagreement. Results indicate that a patient-intervention to improve adherence and outcomes through addressing patient-models would be better implemented if preceded by a physician-intervention teaching physicians how to detect model-disagreement.

SESSION 1320 (SYMPOSIUM)

ACTIVE MAINTENANCE OF HEALTHY LIFESTYLES: UNDERSTANDING AND PROMOTING RESILIENCE IN THE FACE OF AGING'S CHALLENGES

Chair: P.G. Clark, *Program in Gerontology, University of Rhode Island, Kingston, Rhode Island*

Discussant: B. Resnick, *University of Maryland, College Park, Maryland*

The promotion of healthy aging should be based on the concept of active maintenance, "proactive strategies used by an individual to continue a behavior in the face of physical, psychological, social, or environmental changes that may threaten that maintenance." Having older adults anticipate and respond to the inevitable challenges encountered as they get older is the core of this concept. This symposium explores interdisciplinary perspectives on active maintenance, including both its theoretical foundation and its practical implementation in specific interventions. The first paper develops a conceptual framework and explores its relationship to resilience and its promotion with older adults. The remaining papers report on longitudinal data from the two-phase SENIOR Project—a research study assessing interventions to promote increased physical activity and healthier diet in a large sample of community-dwelling older adults. In Phase I, 1277 participants were recruited at time 0, and 968 completed the time 24-month assessment; Phase II (ongoing) recruited 470 at time 66 months from the initial assessment. The second and third papers report demographic and behavior change variables predictive of maintaining key elements of healthy lifestyle and buffering older adults from "going off track" in response to a range of setbacks. Finally, an intervention component based on a telephone coaching call methodology and the psychological concepts used to develop it are presented. Qualitative data establishing a typol-

ogy of active maintenance “trajectories” are summarized; relationships to quantitative measures are also reported. Recommendations for further research and the development of healthy aging interventions are explored and discussed.

ACTIVE MAINTENANCE AND RESILIENCE IN HEALTHY BEHAVIORS: AN INTERDISCIPLINARY CONCEPTUAL FRAMEWORK

P.G. Clark¹, P. Burbank¹, E. Estus¹, B. Evans², D. Martins¹, N. Owens¹, *1. Program in Gerontology, University of Rhode Island, Kingston, Rhode Island, 2. Rhode Island College, Providence, Rhode Island*

The concept of “active maintenance” is proposed as an organizing framework for understanding and promoting healthy aging. It is defined as “proactive strategies used by an individual to continue a behavior in the face of physical, psychological, social, and environmental changes that may threaten that maintenance.” The related concept of resilience has been described as the “capacity to maintain high well-being in the face of adversity.” Resiliency is the ability and speed at which an older adult is able to overcome an adverse event and to return to their previous level of function. This paper presents an interdisciplinary conceptual framework exploring the linkages between these two concepts, incorporating (1) the public health concept of tertiary prevention, (2) the transtheoretical model of health behavior change, (3) the compression of morbidity, and (4) the chronic disease trajectory model. Potential applications to interventions and recommendations for further research are explored.

FACTORS PREDICTING THE MAINTENANCE OF PHYSICAL ACTIVITY: RESULTS FROM THE SENIOR PROJECT

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Identifying variables that predict the long-term maintenance of physical activity in older adulthood is critical. We examined data from the end of SENIOR I, when the study population (N = 328, age = 73.8 years) were all regularly active, to attempt to differentiate individuals who were able to maintain that activity over the subsequent 42 months prior to the SENIOR II project (48.9%) versus those who relapsed to a pre-action stage (51.1%). Physiological variables that predicted the maintenance of physical activity included higher Yale Physical Activity Survey summary scores, greater participation in vigorous activity, lower timed Up & Go scores, and younger age. Behavioral variables that predicted maintenance included higher confidence and greater use of experiential and behavioral processes of change. Understanding variables that predict long-term participation in physical activity in older adults can inform intervention strategies to help sustain successful behavioral changes.

KEEPING ON TRACK WITH A HEALTHFUL DIET: WHAT WE HAVE LEARNED FROM THE SENIOR PROJECT

G. Greene, N. Fey-Yensan, *Program in Gerontology, University of Rhode Island, Kingston, Rhode Island*

Fruits and vegetables (FV) are important components of a healthful diet. To investigate factors associated with maintenance of FV intake, we utilized baseline assessments for Senior II (66 months) of 431 older adults (mean age=80 years) who reported consumption ≥ 5 servings FV/day at the end of the Senior I Project (24 months). Maintainers of ≥ 5 servings (n=258) consumed more servings FV, used the transtheoretical processes of change of consciousness raising and planning ahead to a greater extent, and had greater self-efficacy at 24 months than non-maintainers (n=159). Those who had maintained a high FV intake throughout Senior I (76%) were more likely to be consuming ≥ 5 servings at 66 months than those who progressed to action or maintenance by 24 months. It is important to understand factors associated with long-

term maintenance of healthful eating habits and to target them in interventions to enhance maintenance in older adults.

USING COACHING CALLS TO PROMOTE ACTIVE MAINTENANCE

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As part of a transtheoretical model-based intervention to preserve healthful eating and exercise behaviors, older adults (N=239) were coached to overcome the threats to maintenance of these behaviors. Participants received individualized coaching phone calls to address psychosocial and health-related factors that interfered with active maintenance. These scripted calls were anchored in the concepts and methods of selective optimization with compensation, goal-setting, motivational interviewing, and empowerment. Based on self-efficacy, motivation, and response to individualized coaching calls, several phenotypes or trajectories of active maintenance emerged: (1) those participants readily maintaining behaviors (50%); (2) those benefiting from guidance in coping with adversity (25%); (3) those stymied by adversity (15%); and (4) those with low motivation to maintain behaviors or participate in the intervention (10%). Identifying those vulnerable individuals for whom resilience to adverse events might be strengthened has important implications for targeting future interventions.

SESSION 1325 (POSTER)

AGING PERSPECTIVES AND EDUCATION

MEDICAL AND PHARMACY STUDENTS' PERCEPTIONS OF CARING FOR OLDER ADULTS: IMPACT OF THE HIDDEN CURRICULUM

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Background and Purpose: The number of older Americans is increasing and becoming more diverse. With increasing longevity, older adults will have more frequent contact with various health professions and will utilize more health care services. In order to prepare a skillful and caring workforce, academic training programs must develop appropriate curriculum and activities to increase interest and comfort in caring for older adults. The purpose of this study was to explore the potential role and impact the hidden curriculum plays in student attitudes towards older adults; and to identify perceptions about aging. **Design and Methods:** Second year medical students and pharmacy students enrolled in a Geriatrics Perspectives completed the Caring for Older Adults survey. This survey adapted items from commonly used aging attitude scales in addition to questions about preceptor and peer behaviors towards older adult patients. **Results:** The results indicate that pharmacy students identify a greater need for expanded curriculum in geriatrics; pharmacy students perceive older adults to be less compliant; medical students perceive having less contact with older adults in their future practice; and experience preceptors making less jokes about older patients. **Conclusions:** Exploring the health care training environment and the hidden curriculum provides helpful information in designing appropriate curriculum and training.

A COMPARISON OF TRAINED STAFF ATTITUDES TOWARD DEMENTIA CARE MAPPING IN THE U.S. AND U.K

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Background: Dementia Care Mapping (DCM) is an observational method for assessing the degree to which the care received by people living with dementia in long-term care is person-centered and supportive of their emotional well-being. Trainees learn to conduct DCM, ana-

lyze the results and deliver feedback to staff in their institution with the aim of creating an environment that is respectful of the personhood and emotional needs of people with dementia. Begun in the U.K. by the Bradford Dementia Group, DCM has spread to 22 countries, yet has not gained widespread use in the U.S. This study compares the results of similar surveys of former trainees in the U.K. and U.S. Methods: In 2001 and 2003, respectively, surveys were distributed in the U.K. (n=79) and U.S. (n=82) to assess the impact that training sessions had on staff and their respective attitudes toward DCM. Results: Our findings indicate that American trainees were over twice as likely to report lack of organizational backing (odds ratio = 2.63, 95% confidence interval (CI): 1.03, 6.71) and over four times as likely to report feeling unclear about codes used to evaluate the emotional states of individuals with dementia (odds ratio = 4.24, 95% CI: 1.48, 12.13). Both British and American trainees indicated that time constraints were a problem. Conclusion: While these findings are suggestive of modifications that may help DCM gain more acceptance in the U.S., further study of the reasons for lack of organizational backing of DCM in the United States should be carried out.

FACULTY LEARNING ABOUT GERIATRICS (FLAG) PROGRAM: INCREASING THE CAPACITY FOR GERIATRIC NURSING EDUCATION

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As one of 4 new Hartford Centers of Geriatric Nursing Excellence, the Center at University of Minnesota, School of Nursing (MnHGCNE), has as a primary goal to increase the number of new and existing faculty who will provide academic leadership in geriatric nursing at associate and higher degree programs in the Upper Midwest region, including Tribal Colleges. The purpose of this poster presentation is to describe the design, implementation and outcomes of one of our key initiatives, Faculty Learning About Geriatrics (FLAG) program. The year-long FLAG program includes three components: a five day intensive Summer Institute, ongoing mentorship of FLAG Fellows to support individual academic teaching projects in geriatric nursing, and continued learning opportunities offered by the MnHGCNE. The FLAG program includes four areas of focus: 1) geriatrics and nursing care of elders; 2) learning theory and teaching strategies for geriatric nursing; 3) health care informatics; and 4) leadership for curriculum change. FLAG outcomes are based on evaluations of the Summer Institute, self-evaluations of teaching expertise in geriatric nursing, implementation of individual curricular leadership and teaching projects, and satisfaction with the 2008-2009 FLAG experience. This poster will highlight outcome data from the inaugural program obtained from the 24 FLAG participants from 4 states. Examples of the FLAG Fellows' geriatric nursing teaching and leadership projects and modifications to the 2009-2010 FLAG program will also be presented.

BUILDING GERIATRIC NURSING EXCELLENCE THROUGH A TRANSLATIONAL INTERDISCIPLINARY INSTITUTE

B. Holtzclaw, L.E. Benefield, *University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

Emerging discoveries in aging science offer new insights and challenges for geriatric care across disciplines. National interdisciplinary initiatives encourage cross-disciplinary partnerships in biomedical interpretation for clinical research in Translational Science approaches. Earliest efforts are aimed at bench-to-bedside translation of research, but opportunities for interdisciplinary discussion and problem-solving beyond medicine have been sparse. Doctorally prepared nurse educators in rural areas require innovative approaches to acquire advanced geriatric education and research training. Planned dissemination and follow-up are necessary to promote translational geriatric science. In an effort to stimulate and enrich collaborative cross-disciplinary research

to promote community-based aging-in-place, a 1 1/2 day Summer Geriatric Interdisciplinary Translational Research Institute was developed by the Center of Geriatric Nursing Excellence. Faculty from nursing, medicine, allied health, and related professions met to learn and discuss: 1) emerging scientific findings in aging, 2) processes of interdisciplinary interpretation, 2) reconciling cultures across disciplines, and 3) mapping out researchable questions and strategies for collaborative research. Interdisciplinary faculty and experts offer cutting-edge information from aging science, while facilitators lead discussions on interpretive and collaborative strategies. Outcomes: Participants shared research questions, resources, and ideas for collaboration. Expressed needs for proposal writing, research consultation and inclusion of other disciplines will form basis for next year's summer Institute.

DEVELOPING AND FIELD-TESTING A WEB-BASED EDUCATIONAL PROGRAM FOR GERONTOLOGICAL HOME-CARE NURSING

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Mechanisms of quality improvement/assurance have been poorly developed for home-care nursing in Japan. Most home nursing stations are small with on average 4.3 full-time equivalent staff, and it is difficult to send their staff to outside educational programs. Approximately 75% of clients are 65 years old or older. This study is aimed at developing and field-testing a web-based educational program for quality improvement/assurance based on quality indicators of gerontological home-care nursing. The quality indicators have been developed by our research group for the quality improvement/assurance purpose. They focus on the care processes of commonly-practiced 16 gerontological nursing areas; they are intended for nurses to learn essential gerontological home-care nursing practice. The website is designed so that practicing home-care nurses and university nursing faculties can communicate via the website, i.e., asking questions and adding comments to facilitate the practitioners' learning by the indicators. So far we have included the areas of dementia care and family support in our website. Currently it is open to 5 home nursing stations with 35 registered nurses, and it is overall affirmatively accepted. However issues include: four out of 5 home nursing stations have only one personal computer that is connected to internet, and it is mostly occupied by a secretary; many home visit nurse are not familiar with using computers, especially keyboards; and home-care nurses are very busy with visits and reports and do not have time to check the website. We are continuing our exploration to improve the website for easier access and handling.

SESSION 1330 (PAPER)

BALANCE

LOSSES OF BALANCE DURING DOWNWARD REACH AND PICK-UP MOVEMENTS IN OLDER ADULTS

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Reaching downward to pick up an object off the floor has been associated with falls in older adults but few studies have explored the mechanisms underlying this risk. This study tested the hypothesis that, when reaching down and picking up an object from the floor and compared to young women, older women lose their balance more often, particularly during return-to-stance movements. Healthy young (Y, n = 13, mean±SD age 23±3, BMI 23±4) and healthy older women (O, n = 12, age 76±6, BMI 25±5) volunteers were recruited from the local community to perform symmetric two-handed downward maximal reaches

to a target on the ground. Analysis of joint motion using optoelectronic cameras provided an assessment of the mean number of losses of balance (LOBs), defined as a stepping response, occurring during 1) the downward reach, or 2) the return-to-stance movement. Both reach distance (measured along the floor) and LOBs were normalized by a percent of body height, so as to normalize for reach effort. O had shorter normalized reaching distances ($p < .001$) and tended to have more LOBs upon return to stance. After normalization, O had significantly increased normalized LOBs upon return to stance when compared to Y ($p = .03$). In conclusion, these data suggest that when reaching down and picking up an object from the floor, older women, compared to young, are more likely to lose balance when returning to a stance position. These findings provide one mechanism whereby older women may fall when bending down to the floor.

THE EFFECTS OF TAI CHI ON FALL PREVENTION, FEAR OF FALLING, AND BALANCE IN ELDERLY PEOPLE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Falls are a common problem among older people. Tai Chi (TC) is a promising exercise intervention to prevent falls and fall risk factors as impaired balance and fear of falling. We performed a systematic review and meta-analysis to give an overview of evidence on fall prevention, fear of falling and balance in healthy elderly people were in outcomes were analysed in relation to each other. We used a broad computerised literature search on TC interventions. We assessed risk of bias of included trials with the Delphi criteria list and used a standardised form to extract the data. When we considered studies clinically homogeneous concerning intervention, study population and outcome measures we performed statistical pooling with random effect models. We sought sources of heterogeneity affecting estimates through subgroup analysis according to setting, intervention dose and duration of follow-up. We included 12 trials with a total of 2284 elderly people of 50 years and older. Preliminary results showed a pooled estimate of the Incidence Rate Ratio (the effect of TC on fall rates) of 0.79 (95% confidence interval (CI) = 0.60-1.03). We found a medium effect of TC on fear of falling: Hedges' adjusted $g = 0.49$ (95% CI 0.15-0.81) and a large effect of TC on static balance: Hedges' adjusted $g = 0.82$ (95% CI 0.20-1.45). This systematic review provides evidence that Tai Chi can reduce fear of falling and improve static balance in elderly people. No evidence was found for the effect of Tai Chi on fall rates and dynamic balance.

CUMULATIVE SOMATOSENSORY IMPAIRMENT INDEX PREDICTS GLOBAL POSTURAL CONTROL OVER THREE YEARS

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Somatosensory information from the lower limbs is critical for postural control. However, it is not known whether clinically derived lower limb somatosensory information can independently predict global postural control over time. This study developed Cumulative Somatosensory Impairment Index (CSII) for the lower limbs and evaluated its construct validity for discriminating relevant groups (based on age and pathology) and predictive validity for predicting global postural control over 3 years. Cognitively intact InCHIANTI study participants ($n = 960$, age 21-91 years) were included. CSII was derived from baseline per-

formance on clinical tests of pressure sensitivity, vibration sensitivity, proprioception and graphesthesia. Global postural control was assessed using Frailty and Injuries Cooperative Studies of Intervention Techniques (FICSIT) balance test, time to complete 5 repeated chair stands and fast walking speed, at baseline and at 3-year follow-up. In participants without prevalent neurological conditions ($n = 799$) CSII was significantly different in age-groups classified by decades ($p < 0.001$). Compared to participants without prevalent conditions, CSII was significantly higher in persons with diabetes ($p = 0.017$), peripheral arterial disease ($p = 0.006$) and stroke history ($p < 0.001$). In overall population ($n = 960$), in multiple regression models adjusted for baseline performance and multiple confounders, CSII independently predicted deterioration in FICSIT scores ($p = 0.002$), time for 5 repeated chair stands ($p < 0.001$), and fast gait speed ($p = 0.003$) at 3-year follow-up. In conclusion CSII is a valid measure that detects relevant group differences in lower limb somatosensory impairment and is an independent predictor of decline in postural control over 3 years.

THE EFFICACY OF PHYSICAL THERAPY INTERVENTIONS TO IMPROVE BALANCE AND THE CONVERGENT VALIDITY OF THE ACTIVITIES-SPECIFIC BALANCE CONFIDENCE SCALE AND TINETTI'S PERFORMANCE ORIENTED MOBILITY ASSESSMENT-BALANCE SUBSCALE

E. Hood¹, K. Chui², M. Lusardi², M. Whitmire¹, M. Dour¹, 1. Warren Hospital Balance Center, Phillipsburg, New Jersey, 2. Sacred Heart University, Fairfield, Connecticut

Introduction: Impairments of postural control are frequent and problematic for many aging adults receiving physical therapy (PT). The precision of strategies to evaluate the efficacy of PT interventions targeting balance ability has not been adequately examined. This study evaluates the efficacy of PT interventions for balance and the clinometric properties (i.e., validity) of two outcome measures of balance commonly used in PT: The Activities-specific Balance Confidence Scale (ABC) and Tinetti's Performance Oriented Mobility Assessment-Balance subscale (POMA-B). Methods: Thirty-four consecutive community dwelling out-patients (mean age 78.3 ± 7.0 years, 64.7% female) participated in this case series. All participants had diagnoses that impaired their balance (mean duration 17.4 ± 16.4 months). Interventions included gait training, balance exercises, and strength training among others. Correlations examined the convergent validity between the ABC and POMA-B at evaluation, discharge, as well as percent change. Age, gender, diagnoses, and duration of symptoms were examined as possible covariates. Paired t-tests were used to examine for differences in outcome scores following PT interventions. Results: Mean number of PT sessions was 11.6 ± 3.5 visits. Statistically significant ($p < .01$) correlations were found between the ABC and POMA-B at evaluation ($r = .46$), discharge ($r = .41$), and the percent change ($r = .64$). No covariates were identified. There were significant ($p < .00$) differences in the ABC (mean increase = 14.47 ± 12.59) and POMA-B (mean increase = 4.24 ± 2.73) after PT interventions. Conclusions: Moderate correlation between the ABC and POMA-B demonstrate convergent validity. Significant differences in the ABC and POMA-B demonstrate the efficacy of PT interventions to improve balance.

ESTABLISHING THE MINIMUM DETECTABLE CHANGE (MDC) FOR THE BERG BALANCE SCALE AND THE DYNAMIC GAIT INDEX

S. Romero, VA/RORC, Gainesville, Florida

The goal of this study was to investigate minimal detectable change (MDC) for two clinical instruments used to assess gait and balance in the elder population, the Berg Balance Scale (BBS) and the Dynamic Gait Index (DGI). The standard error of measure (SEM) was employed to calculate the amount of change in a given measure that must be obtained for a clinician to determine that true change has occurred.

The MDC is expressed as a confidence interval around the SEM, indicating the values that are within the range of error attributable to the measuring instrument. The MDC is expressed in the same unit of the original instrument, providing clinicians useful and easy to understand criterion for change in patients' performance. The results of this study indicated that for the BBS and DGI, 6.6 and 3.1 points respectively were required to be 95% confident that "genuine" change had occurred between 2 testing occasions. In addition, MDC values changed based on the ability level of the persons assessed. An advantage of using the standard error of measure to determine MDC is that this method provides information about individual scores. Traditional methods of statistical significance often rely on group differences. Group differences are relevant for researchers, but must be considered with caution when decisions must be made about an individual patient. Knowing the amount of error associated with these instruments can help clinicians make decisions about individual's performance and monitor change overtime.

SESSION 1335 (SYMPOSIUM)

PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS: IMPACT ON OLDER ADULTS

Chair: M. Nelson, Tufts University, Boston, Massachusetts

In October 2008, the U.S. Government released the first ever Physical Activity Guidelines for Americans. In addition to recommendations for children and adults, the guidelines provide targeted recommendations for older adults. Though the guidelines for older adults are similar to those for adults including endurance exercise and strength training, there are some key differences. Older adults should be as active as abilities allow and include balance exercises for those at risk for falls. Also of note is that older adults without chronic conditions do not need to consult a health care provider before participating in physical activity. Dr. Nelson will provide an overview of the evidence that was used to develop the guidelines for older adults in addition to strategies for increasing physical activity. Older adults have the lowest participation rates of any age segment in the population, yet they may have the most to gain by being physically active.

OBESITY, DIABETES AND AGING IN MINORITY POPULATIONS: IMPLICATIONS FOR PREVENTION

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Prevalence rates of diabetes are exceptionally high among United States minority populations especially African Americans, most Hispanic groups, and most Native American populations. Although it is believed that genetic factors are involved it is also apparent that high rates of obesity are also involved especially among women. It is also known that immigrants from Africa and Latin America (especially Mexico) have lower rates of both obesity and diabetes, which have been linked to significantly lower mortality rates among immigrants. It also appears that the apparent immigrant advantage in overall health declines with time in the United States a decline that is faster among women. Health advantages disappear in the children of immigrants. While African and Hispanic immigrants may enjoy a mortality advantage both immigrants and native-born African Americans and Hispanics are characterized by significantly higher rates of disability in old age partly because of high rates of obesity and diabetes in middle age. Disability rates due to obesity and diabetes appear to be exacerbated by high rates of depression in old age especially among women. Implications for prevention of both obesity and diabetes earlier in life as well as depression in old age are discussed. All three health conditions are preventable and successful efforts to address them are reviewed based on current programs.

HEALTHY AGING - PREVENTION APPROACHES THAT WORK

A.B. Newman, *Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania*

More and more men and women are reaching old age in good health and many have high expectations for remaining very active and engaged in life. Active life expectancy is threatened by many different conditions, including but not limited to stroke, dementia, heart disease, osteoarthritis and osteoporotic fracture. Life span is threatened by cancers and infections, many of which are now highly preventable. Although motivation and interest in healthy aging is high, progress towards optimal risk factor management has been less than ideal. Creative approaches are needed that focus effort on proven screening and treatment for risk factors that can be modified. Targets, gaps, and opportunities for prevention along with new paradigms for enhancing healthy aging will be highlighted.

CREATIVE APPROACHES TO PREVENTION AND HEALTHY AGING

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Preventing disease and disability in the aging population is of great importance and will become even more so as the cost of health care continues to rise and there is increasing recognition that incorporating prevention into health care systems can be beneficial. Creative approaches are necessary to implement preventive interventions to reduce the burden of disease and disability in this growing segment of the adult population. The purpose of this Presidential Symposium is to highlight some of the key areas for preventive interventions and to identify strategies that are likely to be translated to the community that will have beneficial effects for large numbers of older persons. Three experts on prevention will highlight areas where prevention efforts with older persons are needed and discuss approaches to addressing them. The first presenter will discuss the new national guidelines for physical activity and its impact on older persons; the second will describe the importance of preventive efforts in obesity and diabetes for older minority populations; and the last will consider clinically relevant interventions that have been shown to work for older persons. An "open mic" question and answer period and panel discussion, led by Lynda Anderson, PhD, Director, Healthy Aging Program, Division of Adult and Community Health in the CDC, will conclude this symposium.

SESSION 1340 (POSTER)

MEDICATION ISSUES

CARDIOVASCULAR (CV) EFFECTS OF DARIFENACIN (DAR) AND TOLTERODINE (TOL) IN HEALTHY VOLUNTEERS: RESULTS OF TWO RANDOMIZED CROSSOVER STUDIES

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Background: The prevalence of OAB and CV co-morbidities increases with age. Elevated heart rate (HR) and decreased HR variability (HRV) have been linked with increased CV risk. The effects of DAR and TOL on HR and HRV in healthy volunteers were evaluated in two studies (S1 and S2). **Methods:** Healthy subjects (≥50 years) underwent three 7-day dosing periods (DAR 15mg, TOL 4mg, placebo) separated by 14-day washouts in 2 placebo-controlled, crossover, double-blind studies. Endpoints included mean HR per 24 hours (h) using 24-h

Holter monitoring and 24-h HRV parameters. **Results:** 140 and 108 subjects completed all three treatment periods in S1 and S2, respectively. In both studies, change in mean 24-h HR was significantly higher with TOL, compared with DAR (difference=1.84 and 2.24bpm, respectively; $p<0.0005$) and placebo (difference=1.42 and 1.84bpm; $p=0.0009$ and $p=0.0037$) but was comparable for DAR and placebo. HRV parameters were comparable for DAR and placebo (PBO). Whereas TOL significantly reduced SDDN Index, a measure of HRV, compared with DAR in S1 ($p<0.05$) and in S2 ($p<0.01$) and compared to placebo in S1 ($p<0.05$). Post-hoc categorical analysis of S1 and S2 showed that higher proportions of subjects had HR increases on TOL vs PBO than on DAR vs PBO. These observations are supported by the distribution of the differences from placebo in mean 24-h HR using a mountain plot. Most common adverse events were dry mouth and constipation. **Conclusion:** TOL but not DAR significantly increased HR and reduced HRV in healthy volunteers compared with placebo.

COST-RELATED MEDICATION NON-ADHERENCE AND FOOD INSECURITY IN LOW-INCOME OLDER ADULTS IN GEORGIA

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Low-income older adults are at risk of cutting back on basic needs, including food and medication. This study examined the relationship between food insecurity and cost-related medication non-adherence (CRN) in a sample of low-income older adults in Georgia. This study used data from the Georgia Advanced Performance Outcomes Measures Project to evaluate new Older Americans Act Nutrition Program (OAANP) participants and waitlisted people in July through November 2008. The study sample includes individuals who completed all study-related variables in a self-administered mail survey ($n=1000$, mean age 75.0 ± 9.1 years, 68.4% women, 25.8% black). Food insecurity was assessed using the 6-item USDA Household Food Security Survey Module. Practice of 5 CRN behaviors (delaying refills, stopping medicines, avoiding new prescriptions, taking smaller doses, and skipping doses) over the last month were evaluated. About 49.7 % of participants were food insecure, while 44.4 % had utilized ≥ 1 CRN strategy in the last month. Those who were food insecure and/or who practiced any CRN strategy in the last month were more likely to be black, low-income, younger, less educated, and to report poorer self-reported health status. Food insecure participants were 2.9 (95% CI 2.2,4.0) times more likely to practice ≥ 1 CRN behaviors than their counterparts even after controlling for potential confounders. Food insecure older adults were more likely to restrict medication use due to cost. Improving food security is important for low-income older adults in order to promote adherence to recommended prescription regimens.

SEASONAL VARIATION OF WARFARIN EFFECT IN RURAL GERIATRIC PATIENTS IN JAPAN

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Background: There has been a clinical speculation that an anticoagulant warfarin may show a seasonal variation. We therefore investigated the possible seasonal variation of anticoagulation activity of warfarin in elderly patients living in Japanese rural area. **Method:** Retrospective study was carried out for outpatients in warfarin treatment, using medical records available in August 2007 to survey administration dates, dose and anticoagulation activity (PT-INR). Next, frequencies of dose increase and decrease were counted by month. In addition, monthly variation of PT-INR by each patient was analyzed. **Results:** Data was analyzed for seventeen patients, with an average age

of 75.0, including 5 females. Underlying diseases that necessitated warfarin treatment included atrial fibrillation (9 cases), previous cerebral infarction (7), pulmonary infarction (2), prosthetic valve (1) and pacemaker implantation (1). Observation period averaged 4.2 years, and total observation points were 598. Doses of warfarin showed a tendency to be increased from January to April and decreased from May to September. Finally, PT-INR for individual patient was well controlled, showing monthly variations within ± 0.5 . **Conclusion:** It was considered that increased doses of warfarin were administered in the period when the warfarin effect was lower, and decreased doses were administered when the effect was higher. Seasonal variation of warfarin effect was observed in elderly patients who were administered with warfarin and living in Japanese rural area. The seasonal variation is considered to be attributed to factor(s) related to vegetable crops harvesting period.

IMPROVING HEALTH CARE OUTCOMES FOR ELDERLY

D. Antimisiaris, J. O'Brien, *Family and Geriatric Medicine, University of Louisville, Louisville, Kentucky*

We present a case that illustrates the value of a comprehensive Geriatric Evaluation when confronted by an elderly patient with multiple medical problems and failure to respond to conventional therapies. With the dwindling amount of time allotted for physician office visits or hospital consults, the successful management of patients living with multiple chronic diseases is becoming increasingly unattainable. Studies report that the median primary care office visit lasts 15.7 minutes covering a median of 6 topics (Tai-Seale). Given that 88% of adults over the age of 65 live with chronic health problems and the mainstay of management of chronic diseases are medications, the challenges of effective management are likely to increase with the aging of the general population. The presentation of this case in which a Geriatric Evaluation Team consisting of a social worker, psychologist, pharmacist, the patient and the family worked for three hours to solve a significant medical problem that improved the patient and their family's quality of life to a significant degree. The family, who had resources and access to the best available medical care had been seeking a solution to this problem for one year utilizing traditional consults by individual specialists. Despite a neurologist making the correct decision for the most appropriate atypical antipsychotic to control agitation in a demented patient with Parkinson's Disease, a failure to associate a new symptom complex with the chosen drug led to the present dilemma. The quick resolution via an interdisciplinary team suggests that this approach should be an essential element in future systems of health care for elders.

SESSION 1345 (PAPER)

PAIN - HS PAPER SESSION

OLDER ADULTS' PAIN COMMUNICATION: THE EFFECT OF INTERRUPTION

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The effect of interrupting older adults as they talk about their osteoarthritis pain was examined in a secondary analysis using a non-randomized two-group design. Participants were part of a study in which older adults orally responded to a series of three pain questions asked by a videotaped practitioner presented on a computer screen. The initial 96 participants were given visual and auditory cues to touch the computer screen to continue to the next question. The remaining 216 participants received only the visual cue after the auditory cue was noted to interrupt participant responses. Older adults' pain communication was audio-taped, transcribed and content analyzed using a priori criteria from the American Pain Society (2002) Guidelines for the Management of Pain in Osteoarthritis, Rheumatoid Arthritis, and Juvenile Chronic Arthritis. Older adults in the uninterrupted group responded with significantly more pain information, $M = 6.3$ ($SD = 3.69$), than

the interrupted group, $M = 5.3$ ($SD = 3.22$), $F(1,300) = 4.49$, $p = .04$, $\eta^2 = .004$. Adjusting for sample size differences, older adults in the interrupted group described 56% less information about the source of their pain, 41% less about the quality of their pain, 29% less about their pain treatments, 24% less about the timing of their pain, and 15% less about their pain intensity. The brief, innocuous interruption diminished the amount of important pain information communicated by the older adults. Deliberate interruptions by practitioners might further reduce communication of important pain information.

CHRONIC PAIN, EXECUTIVE FUNCTION, AND DUAL TASK MOBILITY IN OLDER ADULTS

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Since research has found that chronic pain (CP) may contribute to cognitive deficits, and changes in executive function (EF) may alter gait and fall risk, we tested the hypothesis that CP may act as a distracter or "dual task", interfering with EF and gait in older adults. We studied 245 community-living older adults (mean 76.4±4.2 yrs). Testing included the Mini-Mental State Exam (MMSE) and a neuropsychological battery (Mindstreams) measuring global cognition, EF, motor ability, memory, and visual spatial orientation. Mobility tests included single and dual task gait speed and Timed Up and Go. The SF-36 pain subscale classified subjects with low levels of CP (score >75) and high levels of CP (score <50). CP was associated with lower EF (95.3±9.9) compared to those with low CP (100.2±10.6). There were no differences in other cognitive domains. Gait speed tended to differ by pain group during usual walking ($p=0.06$), and group differences became significant during dual tasking (high CP: 104±19cm/s; low CP: 113±21cm/s; $p<0.03$). There was a modest increase ($p=0.015$) in Timed Up and Go times with high CP (10.0±1.6sec), compared to low CP (9.2±1.5sec). After adjusting for the EF index in multivariate analyses, Timed Up and Go times and dual task gait speed were no longer related to pain. In contrast, adjusting for memory did not change these associations. These findings support the idea that pain may alter EF and gait in older adults, especially under distracting conditions, and that the route from pain to an increased fall risk may involve cognition.

DIFFERENCES IN PAIN BEHAVIOR BETWEEN NURSING-HOME RESIDENTS WITH SEVERE OR MILD DEMENTIA

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Pain represents a major problem with serious consequences for the patient's quality of life. Pain prevalence rates in elderly people with dementia vary enormously between 28% and 83%. This study aims to investigate (1) the under-treatment of pain in nursing-home residents by measuring pain using an observational pain scale and (2) explore the differences in used pain expressions between resident suffering from severe dementia compared to residents with mild/moderate dementia. A cross sectional study was conducted in which a total of 179 nursing-home residents were invited to participate. During 5 minutes of morning care the residents were observed using the pain assessment checklist for seniors with limited ability to communicate (PACSLAC-D). Cognitive status of all residents was evaluated using the Mini-Mental State Examination (MMSE). In total, 117 resident (mean years of age=82.8; $SD=6.1$) were enrolled. 44 % had a PACSLAC-D score ≥ 4 , indicating pain. Overall pain intensity scores were relatively mild (mean=6.3; $SD 2.8$; range 4-13). Of all residents, 39 were mild/moderately demented ($MMSE > 7$) and 68 were severely demented

($MMSE \leq 7$). 10 residents were unable to complete the MMSE. Severely demented residents had overall lower pain scores (mean 5.86; $SD 2.55$) compared to residents who were less severely impaired (mean 7.36; $SD 3.20$). Of the 3 subscales covered (facial and vocal expression, resistance/defense and social-emotional aspects/mood), pain expressions belonging to the 'social emotional/mood' category of the PACSLAC-D were expressed significantly more often by severely demented residents. This study confirms that pain is frequently prevalent in nursing-home residents and that the pain cues differ between severely demented residents compared to residents with mild/moderate dementia.

COGNITIVE IMPAIRMENT AND NON-CANCER PAIN: A PHYSICALLY DISABLING RELATIONSHIP?

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Background: Cognitive impairment (CI) and non-cancer pain (NCP) are both common conditions associated with functional impairment, yet research has not evaluated their independent and interactive contributions to an older person's functional status. Methods: Cross-sectional analysis of the Canadian Study of Health and Aging was used to evaluate the relationship between cognitive status and pain with functional status. Cognitive status and pain were assessed using the Modified Mini Mental State Exam and the 5-point Verbal Descriptor Scale, respectively. Function was ascertained using a summary score of self-report on 7 ADLs and 5IADLs with severity scores ranging from 0=independent to 2=complete impairment. Results: Participants ($n=5397$) were on average 80.2 (6.4 SD) years old, 96.7% Caucasian, and 68.5% had a high school education. 16.6% had mild to moderate CI and 35.9% reported moderate or greater NCP. Summary ADL and IADL scores were 0.5 (1.32 SD) and 1.05 ($SD 1.76$), respectively. Linear regression analysis found CI and NCP were independently associated with poorer ADL CI 0.24 (0.14-0.34), $P<0.001$ and NCP 0.17 (0.10-0.23), $P<0.001$ and IADL CI 0.69 (0.53-0.84), $P<0.001$ and NCP 0.30 (0.20-0.40), $P<0.001$ function. Additionally, CI and NCP displayed a significant interaction with IADLs (CI*NCP) 0.25 (0.01-0.49), $P=0.05$. Conclusion: Cognitive impairment and non-cancer pain are independently associated with poorer ADL and IADL measures and, when present concurrently, are may be associated with even greater functional impairment. Non-cancer pain appears to represent a treatable cause of functional impairment in older adults, particularly for those with cognitive impairment.

SESSION 1350 (POSTER)

PAIN - HS POSTER SESSION

PAIN, PAIN MEDICATIONS, AND FUNCTIONAL OUTCOMES AMONG OLDER ADULTS WITH ARTHRITIS

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Pain is associated with negative functional outcomes in older adults, but is often under-treated. In a secondary analysis of data from the randomized controlled trial of cognitive training in older adults (ACTIVE: Advanced Cognitive Training for Independent Vital Elderly), we examined whether the adequacy of prescribed pain medication influences the relationship between pain and pain outcomes (physical, social, and emotional functioning) among elders with arthritis over 5-years. Participants ($N=1,409$, female=81.6%, mean age=74 years) were sampled from 2,802 community-dwelling older adults in ACTIVE (Willis et al., 2006). Measures included a demographic and health conditions checklist; MOS SF-36 (functioning); CES-D scale, and Pain Management Index (adequacy of prescribed medications). Data were analyzed from three time points: baseline (from 1998-2000), and 3 and 5 years later. Results indicated that over 40% of participants experienced pain that interfered with

activities, over 70% were prescribed inadequate pain medications, and 36% to 85% had moderate to severe functional limitations, across times. In addition, more pain at baseline was significantly related to worse outcomes 5 years later: physical functioning ($r=-.30$), physical role ($r=-.32$), social functioning ($r=-.28$), emotional role ($r=-.21$), vitality ($r=-.30$), and depression ($r=.21$). These relationships were partially mediated by the less adequate pain medication regimen at each measurement. However, longitudinally, participants demonstrated improved physical, social, and emotional functioning as the adequacy of prescribed pain medications increased. These results highlight pain as a significant problem in older adults with arthritis, as well as the importance of adequate pain medication in the management of pain-related functional outcomes.

PHARMACOLOGICAL AND NONPHARMACOLOGICAL PAIN MANAGEMENT IN COMMUNITY-DWELLING OLDER ADULTS

J. Park, *School of Social Work, University of Maryland, Baltimore, Maryland*

The purpose of this study is to describe chronic pain in older adults and their pharmacological and nonpharmacological pain therapies in community-dwelling older adults with chronic pain. A total sample of 163 surveys was completed by community-dwelling older adults in outpatient clinics affiliated with University of Maryland Medical Systems and the Baltimore VA Medical Center. Approximately one third of the participants (36.2%, $n = 59$) reported more than five painful conditions (injured body parts or illness) and a majority of the participants reported suffering from low back pain (60.1%, $n = 98$), knee pain (54.6%, $n = 89$), or hip pain (29.4%, $n = 48$). Of the total of 112 male respondents, only 31.3% ($n = 35$) had utilized nonpharmacological treatment, while more than twice as many (68.8%, $n = 77$) had not yet used nonpharmacological treatment. In contrast, a total of the 51 female respondents, 26 (51%) had used nonpharmacological treatment and a similar proportion (49%) had not utilized the treatment. About one third of the total participants (37.4%, $n = 61$) had received in the past or were receiving nonpharmacological pain therapy (e.g., physical therapy, TENS machine, acupuncture, water exercise) in addition to taking opioid medication. A majority of the participants (62.6 %) had never received nonpharmacological pain therapy and had depended on pain medication alone. In general, the participants appeared to depend on pharmacological therapy and they did not seem to trust the effect of nonpharmacological pain therapy and were reluctant to initiate a new therapy.

SESSION 1355 (SYMPOSIUM)

THE CURIOUS PHENOMENON OF CREATIVITY AND MULTIPLE MASTERY

Chair: D. Sheets, *Health Sciences, CSU Northridge, Pine Mountain Club, California*

Discussant: G. Hanna, *The National Center for Creative Aging (NCCA), Washington, District of Columbia*

Individuals who produce creative accomplishments in a singular genre are relatively common. Less common and rarely examined are the meta-creatives, exceptionally creative individuals who achieve much in two or more areas. These people capitalize on their strengths, intrapersonal knowledge, and interpersonal skills to conceptualize new challenges, overcome adversities, and increase their range and level of mastery. Theoretical perspectives addressing this nexus of creativity include research on the neurology of creativity, hemispheric asymmetry reduction in old age, multiple intelligences, vital involvement, and the experience of “flow.” This symposium draws on these theoretical perspectives as they inform understanding of the lives and works of individuals whose multiple masteries have transcended singular genres of artistic expression (e.g., visual arts, music, literature, dance, design) to include such additional domains as scholarship, activism, and exploratory science – over the course of their adult and later life development.

CREATIVITY, NEUROLOGY, AND SOCIAL-PSYCHOLOGICAL PERSPECTIVES

J. Maier, *RTI, International, Waltham, Massachusetts*

This first presentation in the symposium provides a theoretical foundation for subsequent discussions of several meta-creative individuals. The presentation begins with an overview of what is known from current neurological studies of the brain and creativity, with particular emphasis on music and art. Further investigation into the relationship of neurobiology and the creative process reveals aspects of neurogenesis and neuro circuitry that suggest insight into the meta-cognitive processes that are fundamental to the multiple creativities and masteries demonstrated by the iconic figures to be discussed in the rest of the symposium. The presentation ends with a brief introduction to the social-psychological perspectives of multiple intelligences, mature creativity, “flow,” and vital involvement.

META-CREATIVES: THE TRANSFORMATIVE EFFECT OF THE ARTS

D. Sheets¹, P.B. Schmidt², *1. Health Sciences, CSU Northridge, Pine Mountain Club, California, 2. Bunker Hill Community College, Boston, Massachusetts*

The novels and paintings of Herman Hesse, poetry and paintings of e.e. cummings, prose and illustrations of Edward Gorey, and poetry and drawings of Alan Ginsberg provide a rare view into the dimensions of the meta-creative mind. Each of these talented individuals exemplifies verve, innovation, and creative transpersonal development throughout their lifetimes, receiving critical acclaim for their work. Today, the creative legacy of these individuals sustains an avid following throughout the world. Theoretical perspectives from Howard Gardner, Gene Cohen, and Mihaly Csikszentmihalyi are considered in understanding the creative process and its implications for personal growth and development.

CARRY IT ON

H.Q. Kivnick, *University of Minnesota, Minneapolis, Minnesota*

Pete Seeger is an acclaimed musician, recording artist, and “sing-along-leader.” He is also widely recognized as a stalwart activist and grassroots organizer. Pete has been “meta-creative” at least since the time he departed from his family’s elite academic path and entered the “flow” of his inner convictions. He developed extraordinary musical skills and competencies. He also had considerable impact on progressive social movements whose other spokesmen were not necessarily either artists, in general, or musicians, in particular. Now turning 90, he remains engaged in musical and political spheres, in ways that reflect his considerable genetic gifts, life experience, and indomitable vital involvement in multiple domains of the world around him. The presentation explores the multiple creative masteries of this American icon through the theoretical perspectives of vital involvement and multiple intelligences, highlighting themes that can inform creative approaches to healthy aging in general.

SESSION 1360 (PAPER)

WORKFORCE/STAFFING

STRESS, BURNOUT, COMPASSION FATIGUE AND COPING IN MINNESOTA HOSPICE WORKERS

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Hospice care is becoming increasingly important as the population ages and preferences shift toward less invasive end-of-life care. This study examined burnout, compassion fatigue, and coping among MN hospice staff. A one-time anonymous survey was distributed to 931 staff from 13 hospice programs throughout MN with a 60% response rate. Analyses described the data and examined associations. Respondents

were predominately female (91%), white (97%), well-educated (75%), with mean age of 49 years, and median of 6 years working in hospice; 46% worked in urban/suburban settings, 20% rural, and 34% mixed. Fifteen percent of respondents scored high on depression, 14% for anxiety, 60% moderate to high stress, 14% on compassion fatigue, and 5% as high on burnout. Respondents overall reported high levels of job satisfaction and very high levels of social support. Compassion fatigue appears to affect a significant but small group of hospice workers; burnout mean scores were higher, but fewer passed the cut score for burnout. There is a strong correlation between compassion fatigue, depression, anxiety, and burnout. Increased opportunities to connect with co-workers, convenient opportunities for physical activity, and changes to organizational structure were most frequently reported ways to help reduce burnout and stress. Overall satisfaction with work is high among hospice staff with the majority of those looking for work outside of hospice located in rural settings. Social support was a key factor for the majority of respondents in managing stress and may be a key factor in navigating compassion fatigue and burnout.

SHOULD I STAY OR SHOULD I GO? RETENTION OF SUPERVISORS IN LONG-TERM CARE

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Research on staff retention in long term care focuses primarily on certified nursing assistants, leaving the equally challenging problem of supervisors' retention relatively unexplored. This paper presents findings from a study designed to explore potential factors contributing to retention of supervisors (i.e., licensed nurses) in long-term care facilities. In-depth interviews were conducted with 29 licensed practical nurses and 26 registered nurses in 9 Canadian nursing homes. All data was transcribed and a qualitative analysis was conducted. Four categories reflecting the reasons why supervisors remain in their role were derived: caring relationships with residents and co-workers; accessibility of opportunities; perceived benefits; and a fit between administrative policies and personal life of the nurse. The supervisors' willingness to stay was juxtaposed with their perceptions of why they should leave. Three main categories which were derived included: disrespect from management; a struggle to renegotiate their role in accordance with regulations; and inequities between full and part time staff. This paper will present findings and discuss the implications of retaining supervisors in long-term care as they deal with the tension of whether they should stay or whether they should go.

THE RELATIONSHIP BETWEEN PROPORTIONS OF LPN AND RN STAFFING AND NURSING HOME SURVEY DEFICIENCIES

M. Toles, K. Corazzini, L. Dick, L. Justin, J. Levy, R. Anderson, *Duke University, Chapel Hill, North Carolina*

Professional staff mix is theorized to be a significant component in the quality of nursing home outcomes. Since 2000, nursing facility use of LPN hours per resident per day are essentially unchanged, while RN hours are reduced by 25%. Because of the interdependent nature of LPN and RN collaboration, this change in staff mix may impact nursing home quality. The purpose of this longitudinal study was to explore the relationship between proportions of LPNs in nursing staff mix (LPN / LPN + RN) and the quality of nursing home performance, as measured by survey deficiencies in U.S. nursing homes between 2003 and 2007. Using data from the Online Survey Certification of Automated Records (OSCAR), a mixed model was constructed 1) to control for structural characteristics of nursing homes and 2) to determine whether counts of survey health deficiencies vary over time with changes in proportions of nursing staff. In a sample of U.S. nursing homes (n=14,930), our results indicate that greater proportions of LPNs in the LPN and RN

staffing mix are associated with significantly greater ($p=0.0001$) counts of nursing home health survey deficiencies. These results suggest that optimal nursing home performance may require special attention to staffing mix. Specifically, attention to the non-substitutability of LPNs for RNs in clinical nursing expertise is essential to avoid poorer quality of care.

GERONTOLOGICAL PEARLS: DESCRIBING EXPERIENCES OF WORKING WITH OLDER ADULTS

J. Klein, L. Liu, *University of Alberta, Edmonton, Alberta, Canada*

Global aging creates the need for increasing numbers of health professionals who are trained and skilled in working with older adults. Rather than a challenge, this trend can be viewed as an opportunity for service providers to hone their expertise and examine the values in gerontological work. There is research on work with older adults in medicine and nursing, but very little is published in the rehabilitation literature. This study investigated experiences of working with older adults according to occupational therapists. A description of characteristics specific to the senior population, compared to younger populations, as well as how these traits impact working with older clients are explored. This qualitative research study used the interpretive descriptive approach (Thorne et al., 1997). Data from 16 interviews with occupational therapists and written responses were used. Constant comparison was used to analyze the data. Due to the complexity of care, participants appeared to require both a broad array of knowledge, as well as a significant depth of knowledge regarding age-related conditions and issues, 'a jack-of-all-trades and a master-of-all' concept. According to participants who worked with older adults, three key client characteristics that defined gerontological specialization were medical complexity, stage of life, and cohort-specific features. An emphasis on these characteristics within gerontological curriculum can assist with preparation of health professionals to master both generalized and specialized requirements for this type of work. Findings can inform clinical practice and curriculum development and may be examined in future research on a framework for gerontological practice.

WHO ATTENDS TRAINING IN LONG-TERM CARE SETTINGS? UNDERSTANDING STAFF AND FACILITY LEVEL CORRELATES OF ATTENDANCE

A.S. Beeber, C. Mitchell, S. Zimmerman, *The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

More than half of assisted living (AL) and nursing home (NH) residents have dementia, which requires that staff be familiar with behavioral and cognitive manifestations of the disease and able to provide care accordingly. While training can provide tools to help staff in this regard, staff must attend the training for it to be effective. Virtually no studies of dementia training in long-term care have examined staff participation in training and related correlates. This paper describes staff attendance at a six session dementia care training program based on the Alzheimer's Association Foundations of Dementia Care delivered in NH and AL settings. Study Setting and Sample: Training was conducted in 16 settings in 4 states (7 AL and 9 NHs). Attendees included 8 administrators, 279 supervisors, and 390 direct care workers. Methods: Analyses of the relationships among organizational characteristics, facility variables, and training attendance were conducted. Findings: On average 62% of staff attended at least 1 session, and participants attended 43% of all sessions offered. Attendance correlated with strong leadership, timeliness of response to issues and communication, and higher acceptance of resident behavioral symptoms. Discussion: Long-term care staff attended less than one-half of the training sessions offered to them. It appears that a "culture of training" related to the coordination of care fosters attendance, as does perceived need reflected by residents with more behavioral symptoms. These results suggest strategies to increase training attendance, and also the utility of providing training when it is likely to more relevant to need.

SESSION 1365 (PAPER)

ACADEMIC AND PROFESSIONAL ORGANIZATIONS' RELATIONSHIPS TO STATE POLICIES AND PRACTICES

TRANSLATING RESEARCH INTO STATE POLICY: LESSONS LEARNED FROM STATE AGENCY/UNIVERSITY COLLABORATION

R.K. Chapin, *School of Social Welfare, University of Kansas, Lawrence, Kansas*

State agency staff and university faculty, who collaborate to complete research focused on health and social services for older adults, often do so with the intent that their findings will help inform state policy. However, the path by which research actually influences state policy making is not clearly understood, and young researchers are frequently discouraged because they perceive that their studies simply gather dust on policy makers' shelves. This presentation examines both barriers to and successful strategies for facilitating the translation of research into policy that have been identified during twenty years of state agency/university collaboration. Barriers include: non-involvement of policy makers in conceptualizing and developing research; policy makers' need for immediate results; mistrust of findings reliant on less than ideal state data bases; ineffective dissemination practices. Successful strategies include: tested approaches to effectively engaging policy makers; focusing research to provide insight into recurring issues; methods for supplementing and improving state data bases; strategies for disseminating tailored research briefs to the governor's office, legislators, and advocacy organizations; and involvement in policy shaping events where faculty research can gain a wide audience. These barriers and strategies will be discussed in the context of specific examples that illustrate how research on services for older adults has been successfully translated into policy in one Midwestern state.

PROFESSIONAL CONFERENCE EFFECTS ON ORGANIZATIONAL PRACTICES AND INDIVIDUAL WORK: FINDINGS FROM THE AGING NETWORK

K. McGrew, *Sociology and gerontology, Miami University, Oxford, Ohio*

Professional conferences have multiple objectives, including the exchange of information; the development of professional networks; and the support of the sponsoring professional association(s). Organizations and individual professionals invest resources in the expectation that conference attendance will lead to some form of change in organizational practices or individual work. How is that expectation best met? This paper presents findings from the evaluation of a set of small-scale national conferences designed to improve the performance of organizations in the aging network. With over six hundred area agencies on aging and over two hundred Title VI American Indian, Alaska Native and Native Hawaiian programs, the aging network is playing an increasingly central role in the provision of services that promote the capacity of individuals to remain in their homes and communities. To enhance that role, the National Association of Area Agencies on Aging (n4a), with funding from the Administration on Aging, contracted with Scripps Gerontology Center to design and implement four conferences of approximately thirty-five agency directors each. In a two-day conference, participants learned models and strategies for improving their organizational practices; they also engaged in structured sessions to promote networking. Semi-structured telephone interviews were conducted with each participant six months to one year following their conference. We explored the effects of conference structure, content, and process on subsequent changes in organizational practices and individual work. The evaluation identified several factors that promote the translation of conference content into organizational and individual action and change.

AGING-UNITED COALITIONS: AAA'S AND COLLEGES/UNIVERSITIES TO THE RESCUE

L. Force, J. Kahana, V. Capalbo, *Center on Aging and Policy, Mount Saint Mary College, Newburgh, New York*

The needs of the aging population in the 21st Century will be compounded by the expansion of demographics and the decline of caregiving support systems. Traditional service delivery systems, e.g. the Area Agencies on Aging (AAA's) (N=655) will be expected to address the needs of a new generation, i.e., the elderly cohort of the 21st Century. As a result, innovative approaches and coalitions of support will be required; the opportunity to establish and strengthen intergenerational connections will be essential. College and university settings can be an invaluable resource for AAA organizations. The development of "Aging-United" coalitions can be useful resources in combining the knowledge-base of aging with college students and formal delivery systems. This research project is grounded in the work of Force and Kahana (2006, 2007, 2008) demonstrating how AAA's in partnership with academic settings can create innovative problem-solving strategies and programs related to the aging population. This research provides a model, demonstrating how linkage between the AAA's and college students presents an opportunity to develop dialogue and program development in the aging service field, i.e., AAA agency directors and college students developing meaningful application-based partnerships. This research is part of a larger NIH funded project that supports the training of undergraduate students as researchers in the field of aging. The results from this innovative model, has far reaching implications for resource development of AAA's in the 21st Century.

COMMUNITY-RESEARCH PARTNERSHIPS: PRINCIPLES, PRACTICES AND BENEFITS

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PURPOSE: This study documents the principles, practices, and benefits that gerontological social work researchers regard as necessary for engaging community partners throughout the research process. **METHODS:** A focus group of geriatric social work researchers identified principles and practices related to community involvement in scholarly research. Based on these findings, a 30-item electronic survey was distributed to 91 gerontological social work researchers. Eighty-four surveys were completed (92.3%). **RESULTS:** Essential principles of community-research partnership were identified as beneficence, collaboration and trust. Practices of partnership include the hiring and training of community members, as well as the involvement of community members in identifying key stakeholders and informants, identifying research questions, designing methodology, recruiting subjects, implementing research activities, gathering, analyzing and interpreting data, disseminating findings, and more. Despite varied conceptualizations of "community," study participants reported numerous mutual benefits of community partnership. Community members received free education, training, and development, research skills, substantive knowledge, improved status, and gained subsequent employment from the experience. Researchers gained access to local knowledge, received methodological consultation, review of instrumentation, and help with data collection and analysis. Research projects benefited from access to research participants, and built community investment and stake in research. Finally, local communities gained voice, learned about needs and problems, and identified solutions to community issues. **IMPLICATIONS:** With a growing need for research efforts related to healthy aging, many benefits are achieved by research-community partnerships that uphold the principles and practices of community-based research. Further research is necessary to gain insights from the perspective of the community.

CIVIC AND SOCIAL PARTICIPATION

CIVIC ENGAGEMENT FOR OLDER ADULTS WITH PHYSICAL AND COGNITIVE LIMITATIONS

H. Dabelko-Schoeny, K.A. Anderson, *College of Social Work, The Ohio State University, Columbus, Ohio*

Civic engagement, often defined as the interaction and involvement of individuals with their communities, has been found to be associated with a number of benefits for older adults, including lower depression levels, higher levels of well-being, and slower declines in self-perceived physical and emotional health. Unfortunately, much of the literature that examines civic engagement for older adults has focused exclusively on healthy, able populations. As our society ages, a growing number of older adults will experience physical and cognitive limitations. These limitations can significantly impact their ability to participate in traditional activities that promote civic engagement. Additionally, societal barriers, such as ageism and disabilityism, further limit the opportunities for older adults with disabilities. The civic engagement opportunities that do exist for this group tend to cast them as passive recipients rather than active participants in the engagement process. In this paper, we examine the potential benefits of active civic engagement programs designed specifically for older adults with physical and cognitive limitations. Using the adult day service setting as an example, we explore the roles and responsibilities of geriatric professionals in promoting opportunities for and addressing barriers to civic engagement for this important and growing sector of our society. Preliminary findings from an engagement intervention designed specifically for this population will also be detailed and discussed.

TIME AND MONEY VOLUNTEERING AMONG OLDER ADULTS: CORRELATES OF CHANGE AND STABILITY

N.G. Choi¹, R. Chou², *1. University of Texas at Austin, Austin, Texas, 2. University of South Carolina, Columbia, South Carolina*

Based on data from the first and second waves of the Midlife Development in the United States—MIDUS1, 1995-1996, and MIDUS2, 2004-2006, the dual purposes of this study were to examine the relationship between volunteering behaviors over a 9-year period and to examine correlates of change and stability in both time and money volunteering behaviors among persons age 55 and older ($n=917$). We focused on the changes in volunteering status from no volunteering at T1 to volunteering at T2 and on the stability in volunteering status (i.e., volunteering at both T1 and T2). The multivariate regression results show that a majority of older volunteers of time and/or money were repeat volunteers, and the extent of T1 volunteering was one of the most significant predictors of the extent of T2 volunteering. A higher proportion of older money than older time volunteers tended to be repeat (and possibly persistent) volunteers. Age was not a significant factor for money volunteering, while it was a significant factor for time volunteering. The level of education was a consistent predictor of the extent of both time and money volunteering and of new engagement and stability in volunteering behaviors. Social network size, represented by the number of various meetings attended, was a significant predictor not only of the hours of time volunteering, but also of new engagement and stability in both time and money volunteering behaviors. A high degree of religious identification also appears to provide motivation for money volunteering and affect its extent.

INTERGENERATIONAL ACTIVITY SATISFACTION AND IMPACT ON ELDERS

J.A. Krout, *Gerontology Institute, Ithaca College, Ithaca, New York*

This research examines the level of participation in intergenerational activities with college students for older independent living residents of a senior housing facility. Data on the correlates of involvement and its

perceived impact are also reported. Data were collected via in-person interview from a purposeful sample ($N=52$) residents in 2005. The mean age of the sample was 85, three-quarters were women and had more than a high school education, one-half were widowed, and they had lived in the facility an average of four years. The sample reported relatively high life satisfaction and health and indicated they participated in seven intergenerational activities in the last year. While some findings did vary with the activity type, overall participation was higher for those residents who: were under age 85 and more likely to have a college education; reported fewer IADLs and higher self-reported health; and noted higher levels of social integration and support. More than two-thirds of respondents agreed or strongly agreed that activity involvement resulted in: being more active in life; making more friends at the facility; and improving their knowledge. They were much less likely to agree that participation lead to learning new skills, staying healthy or sharing their knowledge. These findings suggest that residents who might benefit most from intergenerational activities were involved in fewer ones and greater efforts need to be made to identify and include those residents. More opportunities for residents to share as well as receive knowledge should be provided.

THE PERCEIVED HEALTH OF THE RECENTLY WIDOWED AND THE EFFECT OF VOLUNTEER WORK

K.J. Johnson, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

In this study I examine whether formal volunteering moderates the negative stress-related outcome of decreased self-rated health associated with the death of a spouse. Prior research suggests that older adults who engage in volunteer work experience positive effects on their physical health, and it is plausible that the benefits from volunteering will extend to moderating the effects of stress. Using data from four waves of the Health and Retirement Study, married respondents 60 and older in 1998 are followed over 6 years ($n = 7698$), and the self-rated health of married and widowed respondents is compared at follow-up. The baseline sample is 52.0% male, has a mean age of 69.9 years, and reports a mean self-rated health level of 2.9 indicating very good health. During the study period, 1120 respondents reported the death of their spouse, and 30.0% of the recently widowed respondents reported volunteering. Bivariate results comparing the mean self-rated health of the recently widowed volunteers and nonvolunteers showed a mean difference of 0.57 ($T = 8.13$ $p < .00$) with volunteers reporting better health status. Multivariate analyses involving hierarchical stepwise multinomial logistic regression are used to estimate the moderating effect of volunteering on self-rated health with potential baseline confounding variables held constant. The results reveal a meaningful relationship between the transition to widowhood, volunteering and self-rated health. The findings contribute to the literature on the value of social engagement for maintaining the health and well-being of the recently widowed.

THE EFFECTS OF VOLUNTEERING ON OLDER ADULTS' WELL-BEING IN TAIWAN

T. Kuo, *Central Taiwan University of Science and Technology, Taichung, Taiwan*

This paper examines the effects of volunteering on older adults' well-being by studying 100 older volunteers participating in senior services in Taichung City, Taiwan. It is a mixed-method study gathering both quantitative and qualitative data to examine how volunteerism affects one's life satisfaction, relationship with others, physical, psychological and social well-being, and self growth. The results showed that older volunteers, age 60 to 78 years old, participated in services such as the adult day care centers, exercise and nutritional programs, and friendly visitor or telephone assurance programs. The quantitative results indicated that older volunteers rated their health better, lived their lives more satisfied and were interested in doing more activities in the future. The qualitative data showed that older volunteers' lives were changed some-

what by quitting bad health behaviors and living a healthier lifestyle, learning challenging skills that one would not expect to learn, improving relationships with family and spouse, and becoming an active participant in the community. Current literature suggests that older adults engaged in volunteer works because of several factors such as giving back, killing time, fulfilling satisfaction, learning new skills and having self growth. In conclusion, the older volunteers who participated in senior services in Taiwan not only reflected those factors but also carried unique cultural reasons. As Taiwan's population faces one of the fastest aging rates in the world, this paper will discuss implications for creating a culturally-appropriate volunteer policy/structure to train willing older adults to be para-professionals for future aging services.

COMMUNITY PARTICIPATION OVER THE LIFE COURSE: A PARTICIPATORY PATHWAY TO HEALTHY AGING

A.N. Titus-Love, *Sociology, Texas State University-San Marcos, San Marcos, Texas*

This study examines older women's community participation throughout the life course. Current literature lacks information on the life-course and social dynamics of community participation within this growing segment of the population. To fill this gap, the present study addresses the following research questions: What are the patterns of community participation among older women over the life course?; What are the motivators and barriers of community participation for these older women?; What are their perceived well-being?; What are recommendations for increasing community participation levels? Several theories including activity theory, continuity theory and life course perspective inform this study. Thirty women over the age of sixty years living in the Southwest of the United States are interviewed to explore various areas of community participation including voting and participation in community, school and faith-based organizations and local government. Semi-structured interviews are used to guide participants to recollect and describe their community participation as a child, a young adult, and an older adult. This study provides a deeper awareness of the intersection between older women's lived experiences of community participation and their perceived well-being. Community participation is often embedded in social connections, which are known to be associated with successful aging. We can build upon the knowledge of the benefits of community participation for a healthier older adult population. After attending this session, viewers of this poster will be able to obtain a richer understanding of the life-course patterns of community participation among older women.

VOLUNTEERING AS SOCIAL CAPITAL AMONG RESIDENTIAL AND NON-RESIDENTIAL GRANDPARENTS

L.A. Martin, K.J. Johnson, *Gerontology Department, University of Massachusetts Boston, Boston, Massachusetts*

This study examines the extent to which certain grandparent caregivers possess social capital using the activity of volunteerism. Activities likely to involve social capital—membership in social networks and community engagement—must include some form of social contact, and community-based volunteering is consistent with this conceptualization. The purpose of this study is to examine differences in social capital among grandparent caregivers living with the grandchildren, non-residential grandparent caregivers, and non-caregiving grandparents. It is plausible that the different caregiving responsibilities of these groups of grandparents are related to their level of social capital (hours of volunteering). This study uses data from the 2004 Health and Retirement Study (HRS) to investigate the level of volunteering between the three grandparenting groups. The sample consists of 12,268 grandparents with an average age of 68.2. The sample is primarily female 78.8%, white non-Hispanic 72.2%, and 32% report being a volunteer. Compelling findings from preliminary multinomial logit results indicate that the non-residential caregivers have the least amount of volunteering time when other factors are controlled. This may be due to extensive travel,

unforeseen occasions of needed care, or an aspect of the caregiving responsibilities themselves. The intermediate grandparent fundamentally has to modify their life around caregiving priorities. These findings expand current descriptions of grandparent caregivers by contributing to a greater understanding of the social support and social resources available to them.

LESSONS LEARNED FROM A THREE YEAR INTERGENERATIONAL SERVICE LEARNING PROGRAM

C. Hegeman, D.A. Buzanowski, A. Davenport, *Foundation for Long Term Care, Albany, New York*

This poster session will (a) explicate the concept of intergenerational service learning and (b) highlight "lessons learned" based on experiences of five colleges and multiple community agencies in engaging college students, baby boomers, and older adults in highly diverse intergenerational service learning (IGSL) projects. There will be a focus on how other programs can be developed. The college/community partner projects included: two varied and comprehensive fall prevention programs (Stony Brook University and SUNY Brockport); varied intergenerational service learning programs involving multiple disciplines and services, including a program for recovering stroke victims (Ithaca College); a program to prevent relocation stress syndrome (Molloy College); and a clothing, furniture and outdoor design service to address needs of the elderly (Cornell University). Highlights will include: (1) differential definitions of traditional service learning and elder care and IGSL programs; (2) summary of "Intergenerational Service Learning: Linking Three Generations," funded by the Learn and Service division of the Corporation for National and Community Service; (3) profiles of the projects at the five participating colleges and how each project evolved and strengthened over two years; (4) recommendations for running an IGSL classroom; (5) overview of sl pedagogy; (6) evaluation findings and challenges for these IGSL programs; (7) other ways to develop IGSL programs; and (8) update on any funding for such programs.

MATCHING SKILLS AND VOLUNTEER ACTIVITIES AMONG OLDER VOLUNTEERS: A CONCEPTUAL MODEL

J. Park, A.E. Fortune, *School of Social Welfare, University at Albany, State University of New York, Albany, New York*

The Baby Boom generation (born between 1946 and 1964) has unique characteristics and is vastly different from previous generations (Einolf, 2008; Robert, M., Vanderburg, J., Leake, R., & Prieto, A., 2007; The Urban Institute, 2007). They have overlooked and undervalued skills that non-profit organizations can tap for service to their community and for civic engagement. To do so, non-profit organizations can develop a more strategic approach to managing the match between volunteer skills and volunteer activities. An appropriate and efficient matching system will use vast skills, knowledge, and experiences accumulated through the boomers' history of employment. A good match between skill sets and volunteer activities may help older volunteers to experience more satisfaction and more commitment through performing volunteer activities as a means of role expansion and role enhancement beyond their retirement. This paper presents a hypothesized conceptual model for volunteerism among the Baby Boom generation. The conceptual model could be utilized to integrate and coordinate boomer's volunteer activities in non-profit organizations as well as dissemination of a prototype "skilled and professional volunteer" model for community. The model explores the satisfaction and commitment of volunteer activity and later life well-being as a foundation for enhancing the participation of boomers in non-profit organizations. Furthermore, this model can enable organizations to decrease the turnover rate and increase the retention rate of volunteers.

SESSION 1375 (SYMPOSIUM)

DIRECT CARE WORKERS IN NURSING HOMES: QUALITY, IMMIGRANTS, AND CULTURE CHANGE

Chair: *J. Wiener, RTI International, Washington, District of Columbia*
Discussant: *P. Kemper, Pennsylvania State University, University Park, Pennsylvania*

Direct care workers, such as certified nurse assistants, are the backbone of the formal long-term care delivery system. These “frontline” workers help people by assisting with activities of daily living, such as eating, bathing dressing, and toileting, and with instrumental activities of daily living, such as taking their medication and meal preparation. This symposium addresses three important workforce issues in nursing homes. First, what is the relationship between the workforce characteristics in nursing homes and quality of care? Although the recent policy focus on the long-term care workforce is motivated by the belief that it affects quality of care, few studies have examined the effect of workforce factors on quality of care in nursing homes. Second, what are the differences between immigrant and native-born certified nurse assistants? As an increasing number of certified nurse assistants in nursing homes are immigrants, it is important to understand the similarities and differences between the two groups of workers. Third, what can be done to improve the organizational culture of nursing homes? Changing organizational culture is an increasingly common strategy simultaneously to improve quality of care and the working experience of certified nurse assistants.

EFFECT OF WORKFORCE CHARACTERISTICS ON QUALITY OF CARE IN NURSING HOMES

J. Wiener, W.L. Anderson, G. Khatutsky, RTI International, Washington, District of Columbia

Although the recent policy focus on the long-term care workforce is motivated by the belief that it affects quality of care, few studies have examined the effect of workforce factors on quality of care in nursing homes. This study uses data from the National Nursing Home Survey, the National Nursing Assistant Survey, the Centers for Medicare & Medicaid Services (CMS), and the Area Resource File to examine this issue. We analyzed the effect of possible workforce policy initiatives, including higher wages and better fringe benefits, increased training, higher levels of staffing, a more collegial work environment, and turnover, on quality of care. Outcome measures are the individual CMS nursing home quality measures and composite quality measures that are roughly similar to CMS’s 5-Star Nursing Home Ratings. These findings will help policymakers and providers understand whether changes in certain workforce practices may have an impact on nursing home quality.

THE EXPERIENCE OF IMMIGRANTS AS CERTIFIED NURSE ASSISTANTS IN US NURSING HOMES

G. Khatutsky, Aging, Disability and LTC, RTI, International, Waltham, Massachusetts

The growing immigrant population plays an important role in supplying direct service workers to LTC settings, yet little is known about how immigrants compare to native-borne workers. This study analyzes 2004 National Nursing Assistant Survey (NNAS) data to examine immigrant experience of working as Certified Nursing Assistants (CNAs) in nursing facilities across the country. We examine differences between immigrants and native-borne workers on personal characteristics, recruitment factors, working conditions, extrinsic rewards, work place experiences, tenure, job satisfaction and discrimination. Our findings indicate that immigrant CNAs were better educated and less likely to use public assistance programs, used friends and family more as a source of job information, felt better prepared for work in nursing facilities, and expressed higher job satisfaction than non-immigrant CNAs. The presentation will also discuss policy issues that arose from the increase in the use of immigrant and non-citizen labor in LTC.

WORKPLACE RESTRUCTURING FOR NURSING HOME QUALITY OF LIFE: LABOR AND MANAGEMENT PARTNER TO TRANSFORM WORK AND CARE

C.E. Bishop¹, W. Leutz¹, L. Dodson², I. Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts, 2. Boston College, Chestnut Hill, Massachusetts

High-commitment management for workplace restructuring engages frontline workers in transforming labor processes to improve quality and efficiency in numerous sectors of the economy. Its greatest success has been with high-value products and services where customization and quality are central. When focused on frontline workers’ engagement in providing quality of life for residents, the nursing home culture change or person-centered care movement appears to share important features with this approach. In other sectors, some labor unions have hindered workplace transformation while others have actively engaged their members in change. Our case study of a labor-management partnership between a labor union and a group of New York City nursing homes places culture change in a high-commitment management context and considers the role of a labor union in transforming nursing home work. We conclude that management partnership with an organization representing frontline workers can effectively support authentic transformation of nursing home work processes.

SESSION 1380 (SYMPOSIUM)

ENHANCING CARE TO MAXIMIZE HEALTHY AGING FOR PEOPLE WITH DEMENTIA AND THEIR FAMILIES: BUILDING ON THE 2009 ALZHEIMER’S STUDY GROUP REPORT

Chair: *R. Fortinsky, Center on Aging, University of Connecticut Health Center, Farmington, Connecticut*

Discussant: *K. Maslow, Alzheimer’s Association, Washington, D.C., District of Columbia*

The non-partisan Alzheimer’s Study Group (ASG), created in 2008 to assess America’s readiness to address the rapid growth of Alzheimer’s disease and other dementia and to develop a national strategic plan, recently released its final report and recommendations. This symposium will feature the ASG report’s “Alzheimer’s Care Improvement Initiative” in which recommendations focus on “reinventing dementia care by 2012” for people with dementia and their family caregivers. Robert Egge, ASG Executive Director, will explain the ASG’s mandate, its approach to report formulation, and recommendations related to delivering improved dementia care, and to empowering families through community care. Panelists with extensive research, clinical, and advocacy experience in Alzheimer’s care and public policy will discuss implications of the ASG’s recommendations for creatively maximizing healthy aging for people with dementia and their families. Kathleen Buckwalter will react to the ASG recommendations from the perspective of nursing practice and research. Christopher Callahan will provide remarks from his perspective as a physician investigator who has tested the value of enhancing collaborative care teams and uniform protocols to help manage dementia-related symptoms. Lisa Gwyther will present remarks based on her long history of community-based and clinical research and practice with family caregivers. Katie Maslow will serve as symposium discussant by responding to ASG recommendations and to key points made by panelists from her perspective as a public policy expert and advisor to numerous health and social service trials designed to improve the lives of people with dementia and their families.

A FAMILY-FRIENDLY ALZHEIMER’S STRATEGIC PLAN

L.P. Gwyther, 1. Duke University Center for Aging, Durham, North Carolina, 2. Bryan Alzheimer’s Disease Research Center, Durham, North Carolina

Creative approaches to healthy aging must address the public health consequences of continued, almost exclusive reliance on family care for

persons with dementia. The Alzheimer's Strategic Plan recommends expanded access to family information, training and support programs in the context of a value-based reimbursement system of coordinated health and social care for persons with dementia. Appropriate timely and sufficient family education and support may be the missing link in proposed and recent studies of coordinated chronic care. There are evidence-based models for family education and support which have been shown to reduce negative health consequences and increase the skills and effectiveness of family members as defacto care coordinators. This presentation offers recommendations for expanded community translation and uptake of evidence-based or at least evidence-guided practice in community settings to integrate value-added family assessment, training and supports through transitions in care for persons with dementia.

RESPONSE TO THE NATIONAL ALZHEIMER'S STRATEGIC PLAN FROM THE PERSPECTIVE OF NURSING

K.C. Buckwalter, *College of Nursing, University of Iowa, Iowa City, Iowa*

This presentation highlights and discusses ASG Recommendations from the National Alzheimer's Strategic Plan that are most relevant for the nursing profession, in concert with other health care providers and scientists. Specifically, elements of the Alzheimer's Care Improvement Initiative designed to reinvent dementia care by 2012 will be examined in light of potential contributions and leadership roles played by nurses. These include, for example the areas of care coordination, development of patient and family centered quality care measures, delivery of improved dementia care, empowering families through community care initiatives, especially those for persons in the early-mid stages of dementia, and training and support for family caregivers.

REINVENTING DEMENTIA CARE: HOMES, HUBS, CENTERS, AND HOME AGAIN

C. Callahan, *1. Indiana University, Indianapolis, Indiana, 2. Regenstrief Institute, Inc, Indianapolis, Indiana*

The Alzheimer's Study Group urges "a swift transition to a health-care system that encourages and rewards the provision of quality care to those with Alzheimer's disease." Core pillars of this system are envisioned as: (a) an electronic infrastructure to support coordinated care; (b) valid quality of care indicators; and (c) a workforce capable of providing collaborative, team-based care. Recent controlled clinical trials provide evidence for the effectiveness of these core pillars, but there remain multiple barriers to the implementation of coordinated care within primary care. While reimbursement represents one important barrier, there are multiple other barriers ranging from limited treatment options to physical space within primary care. This presentation will examine the potential and pitfalls of several approaches to redesigning primary care including the patient-centered medical home, hub and spoke designs, and specialized referral systems. In addition, the promise and limits of intensifying care in the home will be explored.

THE ALZHEIMER'S STUDY GROUP: A SUMMARY OF THE ASG'S PRINCIPAL FINDINGS AND RECOMMENDATIONS REGARDING CARE

R. Egge, *Alzheimer's Association, Chicago, Illinois*

The Alzheimer's Study Group (ASG) was a blue ribbon task force co-chaired by former House Speaker Newt Gingrich and former Nebraska Senator Bob Kerrey. It was created to assess the impact of Alzheimer's disease and other dementias on the nation and to propose a national strategic plan in response. The ASG delivered this strategy to Congress on March 25, 2009. A central focus of the Alzheimer's Study Group was on the challenges of care coordination for individuals with dementia under Medicare Fee-for-Service. Mr. Egge, who served as the ASG's executive director, will describe the group's care coordination findings and the policy framework proposed to address them.

SESSION 1385 (SYMPOSIUM)

ENVIRONMENTAL CIVIC ENGAGEMENT: IT'S WORKING

Chair: K.E. Sykes, *OCHPEE, US EPA, Washington, DC, District of Columbia*

Discussant: H. Moody, *AARP, Washington, District of Columbia*

Making a difference for the environment and public health is becoming more evident. Four presentations will illustrate elders as community leaders and engaged in making the environment a better place. Although the Baby-Boomer cohort is best known for their activities, environmental and otherwise, during the first Earth Day in the U.S., some of us now beyond the 6th decade of life have been engaged in saving the environment, in protecting air and water, and in fighting global warming. This presentation will summarize activities of several elders who were nominated for the Purpose Prize. Rural communities often find their economic mainstay in the harvesting timber and extracting minerals. Home to a disproportionate number of elders, informing rural communities of the potential health risks associated with mining activities is important. A case study of a rural community in the Midwest will highlight these issues. The Center for Civic Partnerships helps cities use the Healthy Cities and Communities Model to collaborate with residents planning for future needs. Older adults are surveyed about what they think would be important to age in their communities. Results are shared with decision-makers highlighting needed changes for housing, mobility, and other aspects of community life. A state-wide initiative to responsibly dispose of unwanted household prescription drugs that otherwise may have gone directly into ground water and landfills is an excellent vehicle to civically engage older adults as both program planners/implementers and program consumers. This Maine mail-back program is a precedent-setting statewide consumer mail-back program for expired/unused medications.

AGING AND ENVIRONMENTAL ISSUES: USING EPA AGING INITIATIVE MATERIALS TO EDUCATE A RURAL COMMUNITY

P. Cianciolo, *Sociology & Social Work, Northern Michigan University, Marquette, Michigan*

Rural communities have often found their economic mainstay in harvesting timber and mineral extraction, both industries having significant environmental impacts. These communities are also home to a disproportionate number of older adults. There are a number of health conditions where environmental exposures are known or suspected to impact the health of older adults; two prominent pathways for exposure are air and water pollution. This session uses a case study approach involving a rural community in the Midwest. EPA Aging Initiative materials have been used as one means of educating the community about the vulnerability of older adults to environmental toxins that are likely to result if a metallic sulfide mine is cleared for operation.

PRESCRIPTION DRUG RETURN AND DISPOSAL PROGRAMMING AS A VEHICLE FOR OLDER ADULT CIVIC ENGAGEMENT

J. Crittenden¹, L.W. Kaye¹, S. Gressitt², *1. Center on Aging, University of Maine, Bangor, Maine, 2. Maine Office of Adult Mental Health Services, Augusta, Maine*

A state-wide initiative to responsibly dispose of unwanted household prescription drugs that otherwise may have gone directly into ground water and landfills is an excellent vehicle to civically engage older adults as both program planners/implementers and program consumers. The Safe Medicine Disposal for ME program is a precedent-setting statewide consumer mail-back program for expired/unused medications that insures all such drugs will be disposed of in a safe manner. Well over 1,000 lbs. of medications have been mailed back for disposal with the average participant approximately 58 years of age. Almost 50% of these individuals would have flushed their medicine and an additional

25% placed it in the trash if this program was not available. Elders engaged evidence strong commitment to serving as environmental stewards either as participants or program volunteers. Specialized program components that succeed especially in promoting older adult engagement are identified. Supported by US EPA Grant #CH-83336001-0.

APPLYING THE "HEALTHY CITIES AND COMMUNITIES" APPROACH TO CREATING A LIVABLE MAIN STREET FOR OLDER ADULTS

D.C. Smith, *Center for Civic Partnerships, Sacramento, California*

The Center for Civic Partnerships is engaged in a multi-pronged statewide educational program using the Healthy Cities and Communities Model. California provides optimal testing ground for these efforts given the projected growth in the number of people over 60 years old, rising from 14% currently to 20% of the total population by 2020. Successful collaboration among residents and city leadership in planning for the future needs of their aging communities has resulted in action. Cities have conducted resident surveys and focus groups to learn about what older adults think would be important for them to age in their communities. The results were presented to city councils to raise awareness and expedite planning with regard to housing, transportation, and other aspects of community life. The effort provides ideas and strategies for application in planning and allocating resources to create more livable communities for older adults and therefore, people of all ages.

SESSION 1390 (POSTER)

EXPERIENCES WITH DEMENTIA

TAKING CONTROL OF ALZHEIMER'S DISEASE: EVALUATING TRAINING FOR EARLY STAGE PERSONS AND CARE PARTNERS

N.M. Silverstein, R. Sherman, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

Taking Control of Alzheimer's Disease was developed under the philosophy that educating persons with early-stage Alzheimer's disease about the cognitive disorder would empower them to actively participate in the decisions affecting their lives. The program is presented in either a series of four two-hour meetings on consecutive weeks or one-six and half hour session. Persons with Alzheimer's disease attend together with their care partner(s). Gerontology undergraduate students conducted the research. The Community Partner was the Alzheimer's Association, Massachusetts/New Hampshire chapter. Questionnaires were mailed in March 2009 to 150 sets of dyads, triads, or in some cases, quaternions of persons with dementia and their care partners. All persons were included that participated in one of twenty training sessions held between 2004 and 2008. Separate questionnaires were designed to assess the impact of the training in terms of recommendations followed such as knowledge of Alzheimer's disease, and recommendations followed on a series of domains regarding life style changes and future planning. Moreover, questions were included on the format, logistics, resource materials shared, and training content. Questions for the person with dementia did not require fact or history retrieval but focused on the individual's current feelings. The study builds on the work of Roberts and Silverio who evaluated the program in 2003. The former study focused on patient outcomes. This study serves more as a process evaluation and will assist the Alzheimer's Association to make refinements to the curriculum and program to better serve early stage individuals and their care partners.

FACTORS RELATED TO SERVICE BARRIERS EXPERIENCED BY RURAL CAREGIVERS FOR PATIENTS WITH ALZHEIMER'S DISEASE

H. Li¹, G. Kyrouac², *1. School of Social Work, University of Illinois at Urbana and Champaign, Urbana, Illinois, 2. School of Medicine, Southern Illinois University, Springfield, Illinois*

Home and community based services are increasingly available in rural communities. The utilization of these services has been limited. Although there are studies on service barriers in rural communities, very few studies have examined the specific service barriers experienced by older adults with AD. Using the data collected in rural Illinois, this study describes the service barriers reported by rural caregivers and identifies factors related to these service barriers. Considering older adults' cognitive impairments, this study was conducted with 110 primary caregivers for older adults diagnosed with probable or possible AD who needed assistance with one or more activities of daily living (ADL) or instrumental activities of daily living (IADL). Univariate analysis was used to describe the service barriers, and ordinary least square regression was used to identify the factors related to service barriers. In this sample, 80 percent of caregivers reported at least one of the service barriers. The three most frequently reported service barriers were costs (40.0%), unavailability (40.0%), and preference to self-care (38.1%). The study also found that caregiver's marital status ($p=.007$) and family income ($p=.01$) were statistically significant predictors of the service barriers. Caregiver burden only marginally contributed to the service barriers ($p=.07$). These findings have implications to social service providers in rural communities. Social service providers need to carefully identify specific service barriers encountered by each family. Special attention should be given to the caregivers who had limited financial resources, were unmarried, and were burdened by their caregiving responsibilities.

CARING FOR PERSONS WITH DEMENTIA-RELATED BEHAVIORS: A FAMILY PERSPECTIVE ON AN INNOVATIVE MODEL OF CARE

R.J. Karasik¹, J. Berry², J.M. Tasto¹, A. Takamatsu¹, *1. Community Studies, St. Cloud State University, St. Cloud, Minnesota, 2. Dementia Care Foundation, Darwin, Minnesota*

Finding a place that can provide satisfactory and appropriate care for persons with significant dementia related behavioral issues (e.g., wandering, aggression, combativeness) is an on-going challenge for families. The current study examined the impact of an innovative model of care on family members' levels of stress and satisfaction. The model focuses on meeting residents' emotional and spiritual needs, as well as their physical needs in order to reduce challenging behavioral issues and thus the need for behavior-related medications and hospitalizations. Respondents ($n=89$) indicated that prior to the current care model, their family members with dementia lived in a variety of settings, including: assisted living (46%), nursing homes (43%), independent senior living (11%), and geriatric psychiatric units (9%). Dementia-related behaviors included anger (40%), hallucinations (33%), combativeness (32%), and paranoia (30%). While research suggests that outplacement does not necessarily relieve family stress (McLean, 2007; Watari, et al., 2006), family caregiver stress and burden has been associated with a number of variables including the quality of care families perceive their loved one is receiving (Robison, 2007; Tornatore & Grant, 2004). In this study, respondents overwhelmingly indicated high levels of satisfaction with their family member's current care and relatively low to moderate levels of stress. Cost was the only factor that brought a more mixed level of satisfaction. In addition to examining factors related to levels of stress and satisfaction, the current study provides a qualitative analysis of family members' recommendations for coping with challenging behaviors, finding appropriate care, and managing levels of stress.

A CHANGING LANDSCAPE: PERSONS WITH EARLY-STAGE DEMENTIA AND THEIR EXPERIENCES IN SOCIAL INTERACTIONS

J.E. Ataie¹, R. Logsdon², 1. *Portland State University School of Social Work, Vashon, Washington*, 2. *University of Washington School of Nursing, Seattle, Washington*

Although it is widely acknowledged that relationships have a significant impact on the subjective experience of dementia, few studies have asked persons with dementia about their experiences with others. The present study explored how persons with early-stage dementia understand their relationships and interactions with others and how they view the role that increasing memory loss and decreasing discursive capabilities play in this context. Data were gathered from 13 women and 6 men living with early-stage dementia through 8 individual and 4 focus group interviews. Interview transcripts were analyzed using thematic analysis. Although most participants viewed their relationships positively, some expressed anger and resentment about specific experiences, and some voiced fear and frustration about anticipated experiences. Shared activities were viewed as important to social and family relationships. Participants expressed a preference for social activities within a familiar environment with familiar people, and within the small network of family, friends, and neighbors, participants felt their contributions were valued. Almost all participants reported that their social interactions had changed due to increasing difficulties with memory and language. However, most participants reported that these changes were the result of their own choices because previously valued activities or relationships no longer contributed to a sense of wellbeing. Living with dementia meant opening a new chapter and taking on a new role in the story of life. All participants in this study were able to successfully re-story their lives to create new meaning and life satisfaction.

COMMUNICATION BREAKDOWN DURING CARE COORDINATION OF RESIDENTS WITH DEMENTIA IN ALFs

T. Sharpp, *Betty Irene Moore School of Nursing, University of California, Davis, Sacramento, California*

Significance: Assisted living facilities (ALFs) are a prominent source of housing for seniors in the United States. It is estimated that over 50% of the residents in ALFs have some form of cognitive impairment. The only requirements for caregivers in ALFs in California are to have a criminal background check and to receive ten hours of training at the facility. **Purpose:** The purpose of this presentation is to highlight the ways communication broke down during the coordination of care for residents with dementia in an ALF. **Methods:** An ethnographic study was conducted in a 30-bed ALF specializing in dementia care. Over 100 hours of participant observation was conducted over 6 months. Focus groups and informal and formal interviews were conducted with the 20 employees and 5 family members. **Results:** Flaws in communication regarding the care of residents with dementia were noted between many groups including: family members and employees, caregivers and supervisors, health care professionals and supervisors, and residents and caregivers. **Implications:** As elders with dementia are completely dependent on others for their care, it is imperative that communication is successful between all participants in the residents' care.

SESSION 1395 (SYMPOSIUM)

KNOWING THE PERSON IN PERSON-CENTERED DEMENTIA CARE: TACIT KNOWLEDGE, LIFE STORIES, AND BLENDED PERSPECTIVES

Chair: P.C. Kontos, *Toronto Rehabilitation Institute, Toronto, Ontario, Canada*

Discussant: H. Chaudhury, *Simon Fraser University, Vancouver, British Columbia, Canada*

Person-centred dementia care has had considerable influence on the policy, practice and academic literatures. However, whilst the use of

the term is commonplace, there is little research on the sources of knowing that are critical for the individualizing of care that is the hallmark of this approach. The purpose of this symposium is to broaden the discourse on person-centred dementia care by exploring the oft neglected context-specific knowledge required for its implementation in long-term care. Kontos and Naglie's paper highlights the importance of tacit knowledge for tailoring care. Their paper explores how embodied self-expressions by persons with dementia as well as dementia care practitioners' own bodily dispositions facilitate identification that gives practitioners empathic connection with their care recipients and allows them to individualize care. Another important source of knowing explored by de Medeiros and colleagues is the conceptions of self by persons with dementia. Despite that residents with dementia were found to provide significant information about themselves, there was a notable absence of this information in the residents' care plans. Knowing the person in person-centred approaches to care is further explored by Hung in her study of mealtimes in two care facilities. She highlights the importance of practitioners' knowledge of residents' opinions, and habits and personal preferences for supporting their individuality. Collectively these papers give definition to various sources of knowing that facilitate empathic connection and the implementation of person-centred strategies for care.

THE IMPORTANCE OF TACIT KNOWLEDGE FOR PERSON-CENTRED DEMENTIA CARE

P.C. Kontos, G. Naglie, *Toronto Rehabilitation Institute, Toronto, Ontario, Canada*

In the age of scientific objectivity, epitomized by the rise of evidence-based medicine, the importance of qualitative dimensions of clinical decision-making have received insufficient attention. To explore the importance of the body as a source of knowledge that informs clinical decision-making in dementia care we conducted focus groups with forty-three dementia care practitioners from three care facilities located in Toronto, Canada. Our data capture how decision-making in the interpersonal moments of clinical practice is informed by practitioners' understanding of how residents' tendencies and inclinations to move and behave in a particular manner were linked to their previous vocation as well as to their awareness of, and respect for social conventions. In addition, practitioners use their own bodily dispositions to make meaningful connections with their care recipients in the course of providing dementia care. Tacit knowledge provides a novel and indispensable contribution to evidence-based dementia care practice.

RESIDENTS' VIEWS OF SELF: FILLING THE GAP IN PERSON-CENTERED PERSPECTIVES

K. De Medeiros^{1,2}, P. Saunders³, A. Mosby¹, P.J. Doyle⁵, M.E. Jeresano⁴, K. Van Haitma⁶, 1. *The Copper Ridge Institute, Sykesville, Maryland*, 2. *The Johns Hopkins University School of Medicine, Baltimore, Maryland*, 3. *Georgetown University, Washington, DC, District of Columbia*, 4. *Towson University, Towson, Maryland*, 5. *University of Maryland Baltimore County, Baltimore, Maryland*, 6. *Polisher Geriatric Research Center, Philadelphia, Pennsylvania*

A major challenge in person-centered care is knowing who the person with dementia is in order deliver appropriate care. Family members (if present) may know a person's biography, premorbid personality and other details while staff may know residents through mannerisms, preferences, and the stories they tell. Missing, however, is the resident's view of self. The purpose of this paper is to critically examine this gap in knowledge and to evaluate various perspectives of self in light of care plans for two residents with moderate dementia. Residents Bob and Ellie were selected from an observational study on the social environments of people with dementia because of their ability to articulate their self views and the presence of family and staff insight. Information on the person from the three sources was then compared to care plans. Find-

ings suggest that the resident's perspective is key but often overlooked in the understanding of personhood.

MEALTIMES PROVIDE PRIME OPPORTUNITY FOR STAFF TO GET TO KNOW THEIR RESIDENTS WITH DEMENTIA AND BUILD RELATIONSHIPS

L. Hung, *Gerontology, Simon Fraser University, Richmond, British Columbia, Canada*

Mealtimes in care facilities are often described as depersonalized and task-oriented. Knowing the life habits and personal preferences of residents are the foundation of providing person-centered care at mealtimes. Meals are the basis of significant social encounters and are inherently social events that sustain personal identities in significant ways. My paper explores the dining experience of residents with dementia in two care facilities in British Columbia, Canada. Findings from interviews with residents with dementia and observations on a dementia care unit reveal how mundane activities at mealtimes can be extraordinary avenues for staff to get to know their residents and build relationships. Listening to the opinions of residents with dementia and using knowledge of their life history to interpret the psychosocial needs behind behavioural symptoms are critical to supporting the individuality of residents and to fostering person-centred care.

SESSION 1400 (SYMPOSIUM)

MEDICATION MANAGEMENT IN RESIDENTIAL CARE/ASSISTED LIVING SETTINGS

Chair: P. Carder, *Institute on Aging, Portland State University, Portland, Oregon*

Discussant: J.T. Hanlon, *Institute on Aging, Portland State University, Portland, Oregon*

Older persons are prescribed and consume more medications than any other age group. It is not surprising, then, that a major reason that people move into residential care/assisted living (RC/AL) settings is to receive assistance with their medications. As many as 50-80% of residents require such assistance, with most taking an average of almost nine different medications. The four papers in this symposium present findings from three recent research projects that examine medication administration and management practices in RC/AL. The first study (Zimmerman et al) compares medication error rates of licensed and unlicensed care staff in 11 settings in two states. Data include direct observation of medication administration and questionnaires on medication administration knowledge and practices completed by staff members. The second paper (Sloane et al) presents statistical findings on the potential clinical severity of specific medication errors based on data from the same study. The third paper (Carder et al) reports on an ethnographic study of medication administration in three dementia care settings. It includes a typology that describes how direct care workers determine whether or not to administer as-needed (PRN) medications to persons with dementia. The final paper (Schumacher et al) focuses on relations between physicians and RC/AL staff regarding their mutual experiences and satisfaction with medication-related communications and responsiveness. Each paper includes policy and practice implications for medication management in RC/AL.

THE ADMINISTRATION OF AS-NEEDED MEDICATIONS TO ASSISTED LIVING RESIDENTS WITH DEMENTIA

P. Carder, L. Tata, J. Coffee, H. Guenin, A. Lawrence, *Institute on Aging, Portland State University, Portland, Oregon*

This focused ethnography examined how unlicensed direct care workers in assisted living settings make decisions to administer as-needed (or pro re nata (PRN)) medications to residents with dementia. Data include fieldnotes recorded while shadowing staff during consecutive shifts for five days at three settings (resulting in over 300 hours of direct observation), interviews with direct care workers (n=18), and medica-

tion record review. Fieldnotes were coded and analyzed with a grounded theory approach and a registered nurse reviewed medication records. On average, residents had five PRN medications listed in their medication records; the most commonly administered medication was for pain relief. Direct care workers' decisions about whether to administer PRN medications are based on resident request, interpretation of resident behavior, facility norms, and written parameters. Communication is the key concept. Clinical, staff training, and policy implications for administration of PRN medications to individuals who have dementia will be provided.

MEDICATION ERRORS AND STAFF TRAINING IN ASSISTED LIVING

S. Zimmerman¹, L.W. Cohen¹, K. Love², D. Reed¹, P. Sloane¹, T. CEAL-UNC Collaborative², 1. Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. The Center for Excellence in Assisted Living, Falls Church, Virginia

The majority of assisted living (AL) residents have chronic illnesses and require multiple medications. Various types of AL staff administer or assist with administering medications, which has resulted in concern about errors and debate as to whether or not licensed nurses should be required to administer medications. In a study of 4403 medications observed being given to 320 residents in 11 settings, 35% involved an error, with 71% of errors related to timing, which rarely has the potential to cause harm. Fewer than 3% of all medications involved errors with moderate to significant potential for harm. Medication technicians did not have a higher rate of medication errors than did licensed nurses, but staff who were less trained than technicians and were "assisting" residents to administer medications caused more errors than licensed nurses (p<.01). These individuals represented 42%-65% of those who handled medications. Conclusions will address implications for policy and practice.

COMMON SOURCES OF MEDICATION ADMINISTRATION ERRORS IN ASSISTED LIVING

P. Sloane¹, J. Ivey², S. Zimmerman¹, 1. Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 2. School of Pharmacy, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

As part of a study of medication administration in assisted living, over 4,400 medication passes were observed in 11 communities in two states. Most observed errors involved administration outside a 2-hour timing window, which our study's expert panel judged to be clinically unimportant in the majority of instances. Relatively few errors were judged by the panel to constitute a significant possibility of causing harm. Those that did included insulin (9 events), ipratropium (7 events), warfarin (5 events), risperidone (3 events), levodopa/carbidopa (2 events), galantamine (2 events), and oxybutynin, glyburide/metformin, and albuterol (1 event each). In addition, the study found that eye drops and inhalants were particularly likely to be subject to errors compared with other medications (OR = 2.7, p<0.001). We conclude that although administration errors appear to pose a lower risk than prescribing errors in these settings, targeted training toward the medications associated with serious errors is warranted.

UNDERSTANDING MEDICATION ADMINISTRATION IN ASSISTED LIVING: VIEWS OF PHYSICIANS AND HEALTH CARE SUPERVISORS

J. Schumacher¹, S. Zimmerman², P. Sloane², J.K. Eckert¹, B. Harris-Wallace¹, R. Perez¹, P.J. Doyle¹, C. Mitchell², 1. University of Maryland, Baltimore County, Baltimore, Maryland, 2. University of North Carolina, Chapel Hill, Chapel Hill, North Carolina

As a supportive living environment, assisted living (AL) settings typically provide assistance with residents' medications. Data from

the Physician Care in AL Study, an NIA funded study of 90 AL settings and associated physicians, obtained information regarding physicians' understanding of the qualifications of AL staff who administer and monitor medications, physicians' involvement in self-medication competency decisions, and physicians' satisfaction with the information exchanged/communication with AL staff regarding medications. These data and the corresponding perspectives of 90 AL health care supervisors (HCSs) will be presented. Preliminary analyses indicate over 90% of ALs obtain the medications for residents but report difficulty filling physicians' immediate medication requests. The data also suggest the majority of ALs do not use nurses for medication administration and do involve physicians in assessing self-administration competency. Conclusions propose areas for improvement in medication information exchange and strategies for enhancing care for both physicians and AL HCSs.

SESSION 1405 (SYMPOSIUM)

THE MORAL ECONOMY OF RETIREMENT

Chair: *L. Polivka, Florida Policy Exchange Center on Aging, Tampa, Florida*

Discussant: *E. Kingson, Syracuse University, Syracuse, New York*

The failure of the U.S. and global financial systems over the last several months threatens to erode the retirement security of many current and future retirees by driving the economy into a deep recession and undermining the private retirement accounts and other investments and savings workers were relying on to sustain their standard of living in retirement. These system failures have required the federal government to spend upwards of a trillion dollars in bailout funds to prevent a complete meltdown of the financial system, which could cause a depression in the U.S. and global economies. This spending has added to the federal deficit, which may diminish the government's capacity to maintain the main federal retirement security programs, especially Medicare, which would further erode retirement security for future retirees. These failures are largely a result of policies implemented over the last 30 years, especially deregulation of financial markets. This session will shift the focus on these events from the technical and mechanical aspects of the financial collapse and the recession to the underlying moral dimensions of the crisis—from the political economy to the moral economy of what Robert Reich has called the new turbo capitalism that has shed the shackles of regulation and shared prosperity policies like progressive taxation over the last 30 years. This shift in the moral framework of contemporary capitalism has major implications for the future of retirement security, which must be explicitly addressed as part of any effort to restore economic security for future retirees.

THE NEOLIBERAL MORAL ECONOMY AND CLASSICAL CONSERVATISM

L. Polivka, Florida Policy Exchange Center on Aging, Tampa, Florida

This presentation will argue that the deregulation, privatization, and tax-cut policies of the last 30 years were at least partially legitimized by a neoliberal moral economy that not only departed from the moral framework of welfare state capitalism, but also from the moral philosophy of classical conservatism from Adam Smith to Burke, Oskenshott, and Whitaker Chambers. These conservative thinkers cannot be interpreted to support the dominance of the "disembedded" market (Polany) over all other institutions as occurred with the ascendance of neoliberal capitalism, under the guidance of the political economy theories of Hayek and Friedman, over the last 30 years. They would not have been surprised that the distortions in the moral economy caused by unchallenged primacy of the market now threaten our hard-earned system of retirement security and other "life world" institutions.

THE MORAL ECONOMY OF RETIREMENT

H.C. Moody, AARP, Washington, District of Columbia

This presentation will address the moral economy underlying the current financial crisis and its implications for the future of the U.S. retirement system. The presentation is based on several questions designed to provide a framework for constructively engaging issues at the heart of the crisis. In order to rebuild our seriously eroded system of retirement security, we must begin by examining the moral economy of retirement from its origins in the New Deal of the 1930s to its partial disintegration over the last several years. The organizing questions for this inquiry include "Where did my money go? Who is to blame? Who can I trust? What will happen next? and What do I do now?" Addressing these questions can help us restore the ethical norms of truth telling and promise keeping that any viable retirement system requires.

SESSION 1410 (SYMPOSIUM)

THE REPRESENTATION OF WOMEN IN CLINICAL TRIALS: IS NOTHING NEW UNDER THE SUN?

Chair: *P. Herd, University of Wisconsin-Madison, Madison, Wisconsin*

Congress approved the NIH Revitalization Act in 1993, which directed the NIH to establish guidelines to include women and minorities in clinical research. While the overall number of women included in clinical trials has increased substantially over the past 15 years, in certain areas women are still under-represented. In particular, they are not well represented in cardiovascular trials. Heart disease, like for men, is the number one cause of mortality for women. But the underlying patterns of heart disease differ for women and men. Sponsored by the GSA Women's Task Force, this panel, which includes academics and a representative from the NIH, explores the causes and implications of this lack of representation in clinical trials. Moreover, the panelists explore what might be done to address the problem.

ELDERLY WOMEN IN CLINICAL TRIALS WITHIN NIH/NIA

M. Bernard, National Institute on Aging, Bethesda, Maryland

Marie Bernard will provide an overview of the inclusion of elderly women in clinical trials within NIH/NIA.

UNDERREPRESENTATION OF FRAIL ELDERLY WOMEN IN CLINICAL TRIALS

B. Messinger-Rapport, Geriatric Medicine, Cleveland Clinic, Cleveland, Ohio

Older women are under-represented in several major cardiovascular trials. In this session we will discuss impact of this problem on the ability of clinicians to advise their older women of cardiovascular risks and treatments; causes of the under-representation; and, possible solutions.

SESSION 1415 (SYMPOSIUM)

IMMUNOSENESCENCE

Chair: *R.B. Effros, Pathology & Laboratory Medicine, David Geffen School of Medicine at UCLA, Los Angeles, California*

This symposium is designed to cover several cutting edge areas of research, each of which addresses a major facet of the effect of aging on the immune system. Dr. Rita Effros (David Geffen School of Medicine at UCLA) will open the session by providing some introductory remarks on the increasingly recognized role of the immune system in several age-related pathologies. The first speaker, Dr. Gregory Sempowski (Duke Univ., Durham, NC) will then discuss problems and mechanisms of thymic involution, together with approaches his lab has taken to develop novel strategies for thymic reconstitution to enhanced immune function. Dr. Janet Lord (Univ. of Birmingham, Birmingham, UK) will review her research on the neutrophil killing and links to emotional stress

during aging, emphasizing some new findings regarding bereavement effects. Dr. Prakash Sambhara (Centers for Disease Control and Prevention, Atlanta, GA) will discuss the importance of innate immunity with regard to both infection and vaccination in the elderly. Finally, Dr. Jack Gorski (Blood Center of Wisconsin) will introduce some novel molecular techniques used in his research to analyze the changes in the memory cytotoxic T cell responses to influenza in the elderly.

MODULATION OF THYMOPOIESIS ACROSS THE LIFESPAN

G.D. Sempowski, *Medicine/Human Vaccine Institute, Duke University Medical Center, Durham, North Carolina*

Thymus is a primary lymphoid organ responsible for education of T cells, and plays a pivotal role in host response to diverse antigens by generating a broad repertoire of T cells. Aging involutes the thymus and dramatically reduces naïve T cell output. We have characterized this process in both human and mouse thymus tissue, and defined an active cytokine-driven mechanism by which the IL-6 gene family suppresses thymopoiesis. Thymic atrophy is a major factor leading to immunosenescence and decreased efficacy of vaccination in the aged. We have further demonstrated that the thymo-stimulatory agent keratinocyte growth factor enhances humoral responses to influenza HA-whole protein immunization, stimulates thymopoiesis, and increases the frequency of naïve T cells in young and aged mice. These studies suggest that thymic function is malleable in the aged, and targeting this central lymphoid organ may be a viable strategy to effectively modify immune responses in the elderly.

MODULATING INNATE IMMUNITY IN OLDER ADULTS TO ENHANCE DISEASE RESISTANCE AND VACCINE EFFICACY

P. Sambhara, *Influenza Division, Centers for Disease Control and Prevention, Atlanta, Georgia*

A number of protective immune functions decline with age along with physiological and anatomical changes, which contribute to the increased susceptibility of the older adults to infectious diseases and also sub-optimal protective immune responses to vaccination. We have shown earlier that innate immune function is altered with age leading to poor adaptive immune responses to infection and vaccination. I will present recent findings from our studies that indicate altered expression and function of pathogen sensors leads to delayed migration of antigen presenting cell and T cell and subsequent interactions. I will discuss a number of strategies including utilizing newly discovered ligands of pathogen sensors as molecular adjuvants, novel formulations and delivery systems to overcome poor immune function in older adults.

WHEN IMMUNE MEMORY BECOMES FORGETFUL: STUDIES ON FLU-SPECIFIC CYTOTOXIC T CELL REPERTOIRES IN OLDER POPULATIONS

J. Gorski¹, M. Yassai¹, Y. Naumov³, E. Naumova², 1. *BloodCenter of Wisconsin, Milwaukee, Wisconsin*, 2. *Tufts University School of Medicine, Boston, Massachusetts*, 3. *University of Massachusetts Medical School, Worcester, Massachusetts*

The role of the immune system is to protect the host from pathogens and other “insults” to normal health. The adaptive arm of the immune system utilizes specialized cells, B and T lymphocytes, that generate clonal receptors by undergoing a gene rearrangement process. If a lymphocyte’s receptor can recognize a pathogen, the cell can be selected into the immune memory pool for that pathogen. Together the various lymphocytes that respond to the pathogen constitute the memory repertoire. The major effect of aging on the T cell immunity is the increasing reliance on the memory T cell pool due to thymic involution, which decreases and stops production of new T cells. We are analyzing the temporal changes in CD8 T cell memory to influenza at the clonal level. This includes comparison of different age cohorts and longitudinal stud-

ies. In healthy individuals the process can be described as “degrading gracefully.”

NEUTROPHILS: ROLE IN IMMUNESENESCENCE AND FRAILTY

J. Lord, E. Sapey, *Immunology, Birmingham University, Birmingham, United Kingdom*

Susceptibility to infectious disease increases with age and infection related mortality accounts for almost 15% of deaths amongst those aged over 85 years. Moreover, older adults take longer to recover from both infections and physical trauma. These data suggest a decline in the functioning of the immune system with age and an altered response to stress leading to frailty. Neutrophils are the first line of defense against bacterial infections and previous work has shown that several aspects of their bactericidal function are reduced with age, including reduced phagocytic ability. Importantly neutrophil senescence is further compounded by a stress such as hip fracture and we have proposed that this is as a direct result of age-related alterations to the Hypothalamic-Pituitary-Adrenal (HPA) axis. New data showing defects in neutrophil migration and the consequences for recovery from injury and infection will be discussed.

SESSION 1420 (PAPER)

ANALYZE THIS: PERSONALITY AND AGING

THE IMPACT OF PERSONALITY ON DEPRESSIVE SYMPTOM PROFILES IN MIDDLE-AGED AND OLDER ADULTS

L.E. Best, *Andrus Gerontology Center, University of Southern California, Los Angeles, California*

Recent literature shows an increasing interest among researchers in studying the role of personality in the incidence and prevalence of depressive symptomatology. Much of this research has attempted to address the relationship between specific personality traits and depressive symptoms. However, most studies analyzing the link between personality and depressive symptoms utilize small sample sizes, therefore, making it difficult to decipher any population-level variation in personality among those suffering depressive symptoms. Using the Participant Lifestyle Module of the 2006 and 2008 waves of the Health and Retirement Study, I conduct a latent profile analysis in order to decipher profiles of depressive symptoms among a nationally representative sample of older adults in the United States. In addition to socio-demographic variables, I incorporate the Big Five Factor Model for personality to examine the impact of personality traits in creating risk profiles for depressive symptoms. Preliminary results suggest that personality traits such as conscientiousness are a significant characteristic of individuals reporting low levels of depressive symptoms. The results of this study demonstrate the increasing need to examine personality and psychological wellbeing at the population level.

THE EXPERIENCE OF PACE OF TIME: AGE AND CROSS-CULTURAL DIFFERENCES

D. Gruehn¹, J. Dirk², 1. *Psychology, NC State University, Raleigh, North Carolina*, 2. *University of Geneva, Geneva, Switzerland*

Some people have the feeling that time goes by quickly whereas for others time goes by slowly. A common stereotype is that time passes by more quickly as people age. In contrast to this popular belief empirical findings are mixed. To address some inconsistencies in the literature, we asked 142 subjects (18-74 years) to complete an ongoing web-based survey. Eventually, we will recruit 200 subjects for each of three language versions: English, French, and German. In preliminary analyses, we attempted to address three aspects of the experience of pace of time: First, we determined different components in the experience of pace of time (e.g., speed of time, amount of time, future time perspective, and

time orientation). Second, we investigated age differences in these components. In agreement with other studies, we found no consistent age differences. Finally, we examined potential factors that influence the experience of pace of time. In particular, we examined the impact of daily activities and affect on the experience of pace of time. In our preliminary analyses, time passes by more quickly when participants were happier or when they performed more daily activities. This pattern of findings suggests that social and emotional aspects play an important role in the experience of pace of time. If the initial pattern remains significant with the larger sample, the impact of affect and daily activities on the pace of time needs further consideration. In addition, with the larger sample, we will be able to examine cross-cultural differences in pace of time.

AGE PREDILECTIONS FOR PERSONALITY FACETS: INCONSISTENCIES AND POSSIBLE THREATS TO HEALTH RESEARCH

K.T. Petway, E. Zelinski, *Psychology, University of Southern California, Los Angeles, California*

The debate over whether longitudinal changes in personality exist continues with no true consensus. It is likely that personality changes with age may depend largely on what aspects of a personality variable are measured. We administered Costa's & McCrae's (1992) NEO-PI-R to a sample of 56 men and 61 women from the Long Beach Longitudinal Study who completed the measure two times (in 1994 and 2000; mean age at T1 = 64 years). The NEO-PI-R is an application of the five-factor model of personality where each personality factor (Extraversion, Openness to Experience, Neuroticism, Conscientiousness, and Agreeableness) has six lower-order facets. Three conditions were tested: condition 1, using the three facets (per factor) with the lowest age correlation; condition 2, using the three facets with the highest age correlation; and condition 3, using sum scores. In condition 1, only Agreeableness and Openness to Experience at time 2 could be predicted by time 1 ($\beta_A = .685$, $\beta_O = .391$, $p < .05$). In condition 2, performance on the first three factors at time 2 could be predicted almost perfectly by time 1. The relationship between time 1 and time 2 for Agreeableness and Openness to Experience did not change notably in condition 2. Finally, in condition 3, Extraversion was the only factor notably predictable at time 2 using time 1 scores. These analyses suggest that relative to Agreeableness and Openness, identifying how people change over time for Neuroticism, Conscientiousness, and Extraversion is more dependent on how those factors are defined within the measure.

NEUROTICISM AND STRESS: INFLUENCES ON DAILY EXPOSURE, APPRAISAL, AND NEGATIVE AFFECT

S. Scott, B. Baird, C. Bergeman, *University of Notre Dame, Notre Dame, Indiana*

Neuroticism is believed to be an important predictor of stress exposure and reactivity. Event appraisal may be a key component of this relationship; how individuals appraise the threat an event may influence their reactions to it and differences in this appraisal may be related to Neuroticism. In a 56-day diary study of 288 older adults, Neuroticism was positively related higher average negative affect (NA) across days, exposure to higher number of negative events per day, and higher average appraised severity of negative events. In Multilevel Modeling Analyses, we found a significant interaction between appraisal and Neuroticism, in which the effect of severity on NA was higher for those high in Neuroticism. In contrast, although NA was higher on days of higher exposure, the effect of exposure on NA did not vary depending on level of Neuroticism. Both exposure and appraisal predicted NA and were related to Neuroticism, however, they appear to be unique components of the stress process.

OPTIMISM, PESSIMISM, DEPRESSION, AND QUALITY OF LIFE IN ELDERLY PATIENTS WITH HEART FAILURE

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Depression in elderly patients with heart failure (HF) increases the risk of death, rehospitalizations, and nonadherence to treatments. Personal resources, such as optimism, pessimism, and self-efficacy may improve HF outcomes. Of special interest is how high levels of optimism, low levels of pessimism, and high levels of self-efficacy may not only impact HF, but also decrease the deleterious effects of depression on patients with HF and improve quality of life. The current project is a pilot study to determine the relationships among personal resources, depression, HF severity, and quality of life (measured by the Kansas City Cardiomyopathy Questionnaire (KCCQ)). Data were collected from 30 subjects at a heart failure clinic located at a large Midwest university affiliated hospital. Considering the small sample size a medium effect size of $<.30$ was used to determine potential relationships among the variables of interest. Based on these criteria, optimism was negatively related to depressive symptoms, KCCQ scores of symptom burden and total symptoms, and New York Heart Association (NYHA) Classifications. Pessimism was negatively associated with self-efficacy and positively related to depressive symptoms. Self-efficacy was positively associated with the KCCQ score of self-efficacy and Quality of Life and negatively associated with NYHA Classifications and ejection fraction. Depression was negatively associated with the KCCQ scores of symptom stability, self-efficacy, social limitation, and overall summary, and positively associated with NYHA Classifications and ejection fraction. Preliminary findings suggest that HF and its associated dimensions of quality of life may be influenced by personal resources and depression.

SESSION 1425 (POSTER)

COGNITION II

AGE DIFFERENCES IN FACE-NAME ASSOCIATION MEMORY ARE MODIFIED BY CONTEXTUAL CHARACTERISTICS OF THE STIMULUS

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Recognition memory declines with age, and some studies have found a disproportionately greater impairment to recognition of associations between items than for the items alone. Naveh-Benjamin and colleagues (2004, 2009) demonstrated support for this using face-name pairs. In an effort to replicate and extend those findings, two similar versions of the face-name task that differed primarily in the contextual richness of the face stimuli were administered to young and older adults. One version used face stimuli with low visual context at study and test, and the other used face stimuli with richer and more variable visual context. In both, participants first studied face-name pairs with instructions to remember the names, faces, and associations; they were subsequently administered four separate 2-alternative, forced-choice recognition tests on the items and associations. Recognition performance with the high context stimuli closely replicated the earlier findings, with older adults performing disproportionately worse on the association recognition task than the item task, relative to younger adults. However, results from the low context stimuli did not replicate these findings: despite demonstrating age-related recognition decrements overall, older adults did not differ from the young participants on item and associative recognition tests. The findings, while supporting age-related associative deficit hypothesis (Naveh-Benjamin, 2000), indicate that the deficit may depend on age differences in use of the context surrounding the face stimuli.

AGE RELATED DIFFERENCES IN THE FACTORS WHICH INFLUENCE ON PROSPECTIVE MEMORY

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Background and aim Previous researches on prospective memory (PM) revealed an age-related paradox, that is, younger participants performed better than older participants in laboratory settings, whereas older participants performed better than younger participants in naturalistic settings (Henry et al., 2004). However factors which cause the paradox are unknown. The purpose of the present study is to explore the factors which influence good PM performance in older people in naturalistic setting. Methods and Material The questionnaire survey was administered to young (N=352 age range; 18-24), middle-age (N=325 age range; 55-64), young old (N=564 age range; 65-74). All participants answered to the following questionnaires, self reported PM failures as dependent variable, physical and mental state, visual and hearing impairment, life style; how busy or how routinely pass one's days, Big-5 personality, and meta-memory; positive attitude to memory, cognition to memory task as independent variables, age, sex, living condition, education, frequency to go out as control variables. Results Separate multiple regression analyses for each age group was performed. Neuroticism and busy life style have influenced on PM failures in all age groups. Influences of visual and hearing impairment and positive attitude to memory on PM failures were observed in middle-age and young old. Only in young old, routinely life style have influenced on PM failures. Score of routinely life style for middle-age and young old were higher than young. Conclusion Our results showed that causal relationship between PM and relating factors were different in different age groups. In addition, life style was important only for young old. Life style might be a core factor for older people to have good PM in naturalistic settings.

THE RELATIONSHIP BETWEEN AGE, INTRUSIVE THINKING, LIFE STRESS, AND COGNITIVE PERFORMANCE

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There is a good deal of evidence that stress is linked with cognitive functioning; however, there are many unanswered questions about the nature of this relationship. Previous findings suggest that moderate amounts of stress are beneficial but high amounts of stress may be detrimental to performance. One possible explanation for this curvilinear relationship is that people cannot inhibit thoughts about the stressors in their lives once they reach a certain threshold. In support of this notion, prior research suggests that individuals reporting more intrusive thinking demonstrate poorer performance on cognitive tasks compared to individuals reporting less intrusive thinking but it has yet to determine whether or not the link between life stress and IT differs between young and older adults. In the current study, a total of 260 men and women between the ages of 17 and 98 years agreed to participate. The young adult sample comprised of 160 individuals between 17 and 39 years of age and the older adult sample consisted of 100 individuals over the age of 60. We will present cross-sectional findings that suggest that the effects of stressful life events may be more pronounced for older adults who report more intrusive thinking compared to older adults who report less intrusive thinking. The current findings support the notion of an inhibitory deficit/ decrease in attentional control across the lifespan.

CONFRONTATION NAMING IN HEALTHY AGING, MILD COGNITIVE IMPAIRMENT AND ALZHEIMER'S DISEASE. INSIGHT FROM THE BOSTON NAMING TEST

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INTRODUCTION Visual confrontation naming is the ability to pull out the correct word of an item visually presented. Cognitive impair-

ment produces decline in this naming ability bigger than effects founded in other language measures, although it remains unclear the performance in very early stages of the disease. Both general cognitive measures such as memory span or visuo-perceptual speed and age could be also play a role in this relation. **METHODOLOGY** The sample was composed of 322 older adults belonging to the Donostia Longitudinal Study sample, ranging from 2 to 4 in the Global Deterioration Scale (GDS). According to the aims of this work, Boston Naming Test (naming), WAIS Inverse-digit span (memory span) and Trail Making Test A time performance (visuo-perceptual speed) scores were analyzed. **RESULTS** Kruskal-Wallis test shows significant between-group differences in the Boston Naming Test ($p < .001$). Stepwise regressions were then carried out taking naming capability as dependent variable. The following variables entered in the model: for GDS2, visuo-perceptual speed ($p < .001$; $R = .374$; $R^2 = .140$) and memory span ($p < .001$; $R = .455$; $R^2 = .207$); for GDS3, memory span ($p < .005$; $R = .402$; $R^2 = .162$); for GDS4, memory span ($p < .005$; $R = .332$; $R^2 = .110$) and age ($p < .001$; $R = .426$; $R^2 = .181$). **DISCUSSION** The Confrontation naming ability measured with the Boston Naming Test shows changes through cognitive status even in very early stages. Memory span seems to play a role in these changes, while speed is only relevant in older adults without objective cognitive impairment.

COGNITIVE SCREENING TOOLS DIFFERENTIALLY RELATE TO IADL DIFFICULTY ACROSS LEVELS OF READING ABILITY

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We investigated the association of the Mini-Mental State Examination (MMSE) and Clock Drawing Task (CLOX) with impairments in instrumental activities of daily living (IADLs) across levels of reading ability. The MMSE and spontaneous clock drawing (CLOX1), Wide Range Achievement Test-3 (WRAT-3) Reading subtest, and self-reported IADL difficulty were administered during an in-home assessment at four-year follow-up of the UAB Study of Aging, a longitudinal study of community-dwelling older adults. The 589 participants with complete data were 53% white and 54% female, with mean age of 77.5 years ($SD = 5.75$). Participants were stratified into quartiles based on WRAT-3 reading scores. After controlling for age, gender, race, and urban/rural residence, multiple regression analysis revealed a significant interaction between level of reading ability and MMSE ($p = .008$) as well as CLOX1 ($p = .012$) in predicting self-reported IADL difficulty. To further examine these interactions, we investigated associations between screening tests and IADLs within the different levels of reading ability. In multiple regression models adjusted for demographic variables, despite the significant interaction, MMSE was found to be a significant predictor of IADL difficulty in all four reading levels (from lowest to highest quartile: $B = -.275$, $p = .002$; $B = -.161$, $p = .045$; $B = -.202$, $p = .028$; $B = -.273$, $p < .001$). For CLOX1, performance was significantly associated with IADL difficulty in only the lowest reading ability group ($B = -.189$, $p = .031$). In this sample of community-dwelling older adults, the MMSE appeared to be associated with impairments in IADLs regardless of reading ability, while CLOX1 score may be most useful in detecting potential IADL difficulty among those with lower reading ability.

COFFEE, SODA, AND TEA: THE EFFECTS OF CAFFEINE CONSUMPTION ON COGNITION

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Research on the effects of caffeine consumption on cognition has yielded inconsistent findings (Johnson-Kozlow, Kritz-Silverstein, Barrett-Connor, & Morton, 2002). While some researchers have discovered

that caffeine has positive effects on memory performance, others posit that caffeine has deleterious effects on cognition (Lieberman, Tharion, Shukitt-Hale, Speckman & Tulley, 2002). The present study examined the effects of caffeine consumption on memory test outcomes in 107 community-dwelling older adults (mean age = 68.84 years; 66.7% female, 33.3% male; 93% European-American; 56.8% married) who underwent a brief memory screen due to self-reported concerns about memory loss. Results revealed no significant differences due to level of caffeine consumption (none, low, medium, high) on the MMSE, $f(3, 37) = .75, p = .53$; verbal memory $f(3, 37) = .62, p = .60$; attention/processing speed $f(3, 37) = .22, p = .88$; executive function $f(3, 37) = .16, p = .92$; visual memory $f(3, 37) = .33, p = .80$; or depression/anxiety $f(3, 37) = .82, p = .49$. These findings provide support for the notion that caffeine consumption may have little to no effect on cognition in older adulthood. Interestingly, the current data indicate that older women may be able to maximize global cognitive functioning by increasing caffeine intake.

A CARIBBEAN TALE: THE USE AND ADAPTIVE FUNCTION OF AUTOBIOGRAPHICAL MEMORY IN ADULTHOOD

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A growing body of work has examined the relative frequency of using autobiographical memory for self, social, and directive functions across adulthood. Less work has examined the adaptive value of these memory functions for individuals' psychological health. Thus, the goals of the study were to: (i) extend work on the use of the functions of memory to a lifespan sample from Trinidad and Tobago, and (ii) examine whether using the functions of memory predicts psychological well-being differentially by age. Participants ($n = 178$) ranged in age from 18 to 61 years old, and race was representative of the population. Participants completed the Thinking About Life Experiences questionnaire which assesses how often individuals think and talk about the past in general, and for self-continuity, social-bonding, and directing-behavior functions. They also completed psychological well-being scales: positive relations with others, purpose in life, and self-acceptance. Increasing age was related to less frequently using autobiographical memory functions. Although talking and thinking about the past predicted positive relations with others and self-acceptance, respectively, self and social functions of memory did not predict well-being. The directive function of autobiographical memory, however, predicted the extent to which people reported having purpose in life, regardless of age. Results are discussed in terms of the role that thinking and talking about the personal past has on the psychological well-being for individuals of all ages, and how using memory to direct behavior and find purpose in life may be particularly salient in a multicultural, developing society.

OLDER ADULTS' DESCRIPTIONS OF COGNITIVE DECLINE AND CONCERNS ABOUT BRAIN HEALTH

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Cognitive health is a major concern of our aging population. A better understanding of this concern and the terms older adults use to talk about cognitive decline will help develop effective health communication promoting cognitive health. Understanding how culture and ethnicity affect the content and expression of cognitive concerns will make future communication more effective. We conducted nine focus groups with ages 50+ (mean 72) in South Carolina, five with African Americans ($n=42$) and four with non-Hispanic whites ($n=41$). The majority reported at least high school education. Trained moderators asked: "1. What words do you use to describe seniors/older people who have a loss of memory or thinking ability?" "2. Tell us about any concerns you may have about your ability to keep your memory or ability to think as you

age." Three researchers independently coded verbatim transcripts. Grounded theory identified themes. African Americans most often used the words "Alzheimer's" and "senile," and expressed concern that depression commonly accompanies memory loss. African Americans were more likely to say that memory loss is a part of normal aging. Two prominent concerns, more frequently expressed by African Americans, were forgetfulness and genetic risk. Whites predominately used "senior moment" and "dementia." Primary concerns for whites included social impact and end-of-life issues. Shared concerns included loss of memory and physical abilities. Results will help in the design and implementation of tailored communication interventions to promote cognitive health.

INTERACTION BETWEEN EXECUTIVE FUNCTION AND MOTOR SPEED AMONG OLDER ADULTS

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Purpose: Obesity is associated with poor performance on executive function and motor speed tests. This study examined potential interaction between executive function and motor speed in obese and non-obese older adults. Subjects: Participants were 11 healthy, non-obese and 11 healthy, obese older adults as categorized by the Body Mass Index. Methods and Materials: Participants controlled a computer generated disc with leg movement while viewing a sine wave which moved across a monitor at a slow or fast rate. They were instructed to keep the disc within the sine wave. In one executive function condition (non-challenged), moving of the leg caused the disc to move in the same direction as the leg. In the other condition (challenge), moving the leg in one direction caused the disc to move the opposite direction. Data analysis was a mixed design 2 (obese, not obese) x 2 (non-challenged, challenged) x 2 (slow, fast) analysis of variance with absolute average deviation from target as the dependent variable. Results: Analysis revealed main effects for executive function (non-challenge, Mean=3.44, challenge, Mean=10.90, $F(1,20) = 46.81, p < 0.05$) and speed (slow, Mean=6.06, fast, Mean=8.35, $F(1,20) = 12.58, p < 0.05$) and interaction between executive function and motor speed ($F(1,20) = 20.95, p < 0.05$). No significant findings were related to obesity. Discussion: Challenges to executive function affected accuracy of movement especially at fast speed. Obesity did not affect accuracy of movement in any condition. Obesity findings must be questioned due to low statistical power (0.20).

THE EFFECTS OF RESOURCE ALLOCATION AND FLUID ABILITY ON TEXT MEMORY CHANGE THROUGH LATER ADULTHOOD

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Age deficits in text memory may be partly due to older adults' reduced resource engagement for conceptual processing (i.e., textbase strategy) that supports memory for content (Stine-Morrow et al., 2006). We investigated the effects of fluid ability, verbal ability, and conceptual processing developmentally on text memory within an older sample. Participants [young-old (YO; 60-70 yrs, $n=91$); old (O; 71-80 yrs, $n=74$); oldest-old (OO; 81-94yrs, $n=32$)] read a series of sentences for recall. Word-by-word reading times were measured and regression was used to isolate attentional resources allocated to textbase processes, controlling for word-level factors. While fluid ability showed monotonic declines with age ($YO > O > OO$), $F(2, 180) = 16.81, p < .001$, verbal ability, $F(2, 180) = 1.90, p = .15$, and textbase allocation, $F < 1$, were relatively stable, as was text recall, $F(2, 180) = 1.99, p = .14$. Even though the textbase strategy predicted recall in the sample as a whole, this was not true for the OO group. For the YO and O, both textbase allocation ($\beta = .44$ and $\beta = .19$, respectively) and verbal ability ($\beta = .46$ for both) were significant predictors of recall. However, in the OO group textbase allocation did not predict recall; rather, their recall was predicted only by fluid ability ($\beta = .50$). These data suggest that resource allocation to conceptual pro-

cessing and age-related growth in verbal ability may support text memory among older readers, but that among the oldest-old fluid ability may be the limiting factor in remembering text.

WHY REMEMBER? ADULT AGE DIFFERENCES IN FUNCTIONAL USE OF THE PERSONAL PAST

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The study goal was to investigate the adaptive functions of thinking and talking about the personal past in older and younger adults. The specific aims were to examine adult age differences in: (i) overall frequency of thinking and talking about the personal past, and (ii) using autobiographical memories of one's past to serve self, social, and directive functions. Possible mediators were assessed to explain any age differences. Using a standard instrument (TALE, 2009), younger and older men and women (N = 185) provided reports of the frequency with which they think and talk about their personal past in general, and to serve each of three major psychosocial functions: maintaining self-continuity, creating social-bonds with others, and directing current and future behavior. They also completed measures of Self-concept Clarity and Future Time Orientation. All participants reported thinking about the past more than talking about it. In keeping with their developmental life phase, younger adults reported more often using autobiographical memories to create self-continuity, and to direct future behavior. The relation of age to the functional use of memory is mediated by older adults' having greater self-concept clarity than the young (self-continuity function), and to younger adults having a more open-ended future time perspective than older participants (directing-behavior function). Younger and older adults equally endorsed using memories to maintain social bonds. Findings are discussed in terms of how autobiographical memory is adaptively used to serve developmental tasks at different points in the adult lifespan.

THE IMPACT OF SOCIAL EXPERTISE AND SITUATIONAL GOALS ON SOCIAL COGNITIVE FUNCTIONING IN ADULTHOOD

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Inconsistent with hypothesized positivity biases in old age, research on social cognition has suggested that middle-aged and older adults are more likely than younger adults to focus on negative behavioral information when such information is diagnostic with respect to underlying traits (e.g., morality). This appears to reflect a type of social expertise which may "trump" chronic emotional goals thought to bias attention toward positive information. It is possible, however, that older adults will exhibit more bias in judgments in spite of higher levels of expertise when emotional goals, such as interacting with a person, are consciously activated. To test this idea, adults aged from 20 to 85 (N = 115) read two descriptions of fictitious people that were composed of positive and negative behaviors relating to either morality or competence. Of interest was the extent to which participants' ratings of competence and morality were influenced by activated impression-formation versus social-interaction goals. Consistent with past work, negative information was weighted more in making morality judgments, whereas positive information was weighted more in judging competence. This effect was particularly strong in middle-aged adults, suggestive of high expertise. When social goals were activated by having participants choose one of the described targets as a potential interaction partner, all trait judgments became positively biased, with this effect being disproportionately great in older adults. Activation of social goals did not, however, affect older adults' attention to diagnostic information. This suggests that responses in later adulthood may reflect both expert behavior and chronic emotional goals.

AGE AND RACE DIFFERENCES IN THE BENEFIT OF DAILY CONTROL BELIEFS ON COGNITION

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Studies using cross-sectional designs typically find a beneficial effect of control beliefs on cognitive performance (e.g., Miller & Lachman, 2000). We sought to extend these findings by implementing a daily diary study of control beliefs and performance with younger and older adults from various racial and educational backgrounds. Specifically, we were interested in the within-person association between control beliefs regarding memory and performance on a number comparison task and whether that association depended on individual differences in age and race. Fifty younger adults and 43 older adults participated in an 8-day daily diary study assessing control beliefs and cognitive performance. Multilevel models, controlling for education, indicate that daily increases in control beliefs are equally beneficial to performance for White younger and older adults. However, non-White older adults experienced more benefit from increases in control beliefs compared to non-White younger adults.

THE ROLE OF STRESS AND PHYSICAL ACTIVITY IN OLDER ADULTS' EVERYDAY MEMORY PERFORMANCE

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The present study assessed the role of stress and physical activity in older adults' adherence to an everyday memory task. For 2 weeks, 20 older adults (M=74, SD=6.42) were asked to remove 1 placebo pill 4 times per day at specified time intervals from a medication monitor to track the accuracy of adherence. Self-reported stress and control levels along with pedometer data were also collected daily. Multilevel modeling, used to examine the daily predictors of adherence, showed that 21% of the variance in everyday memory was between people ($\tau_{00} = .09$, $z = 2.42$) and 79% was within-people ($\sigma^2 = .35$, $z = 11.38$), indicating significant fluctuations over time. Although there were no main effects of daily steps per hour ($\gamma_{10} = -.0002$, $t = -.86$, $p = .39$), total number of daily stressors ($\gamma_{20} = -.16$, $t = -.97$, $p = .33$) or daily control ($\gamma_{30} = -.09$, $t = -.86$, $p = .39$), there was a significant 3-way interaction of Steps X Control X Stressors ($\gamma_{13} = -.0002$, $t = -1.92$, $p = .05$). The interaction revealed that the best adherence occurred on days when control was high, the number of steps taken was high, and no stressors occurred. The pattern was different on days of low control; when the number of steps taken was high on low control days, adherence increased in response to stressors. These results suggest that the stressor- and control-related context of activity is important for adherence to a challenging everyday memory task.

SCREENING FOR COGNITIVE DEFICITS IN THE ELDERLY SUBACUTE PATIENT: A COMPARISON BETWEEN THE TICS-M AND MMSE

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Admission-related physical limitations/frailty of the elderly subacute population make it prudent to utilize instruments to assess cognition that are brief and dependent on minimal physical responses. In this study, we compared the Telephone Interview of Cognitive Status-Modified (TICS-M; items not dependent on physical abilities including vision) with the Mini-Mental State Examination (MMSE; some items dependent on physical abilities including vision). The MMSE and TICS-M were administered to 49 subacute clients. Cognitive Performance Scale (CPS) scores were computed from the Minimum Dataset. Subjects had a mean age of 78 ± 7 , were predominately female (71%), White (69%), with a high school education or more (98%). TICS-M and MMSE total test scores were highly correlated ($r = .78$, $F(1,47) = 74.5$, $p < .001$). Education was correlated with both measures and increased the asso-

ciation to $r=.83$ ($F\text{Change}(1,46)=12.1, p<.001$). We computed 5 cognitive domain scores within each test and observed the strongest relationship for Orientation ($r=.68, p<.001$) with Registration ($r=.12, ns$) being the lowest. Correlations between the tests for Attention/Calculation, Comprehension, and Delayed Recall were moderate ($r=.36$). When controlling for education, only the relationships for Comprehension and Delayed Recall were reduced ($r=.17$ and $r=.04$, respectively). We also compared the sensitivity of the TICS to detect dementia and observed only 1 misclassified case when defined by the CPS (score > 2) as compared to the MMSE with 2 cases misclassified. The TICS was sensitive for the detection of dementia. However, a number of individual cognitive domains showed weak correlations when compared to the MMSE and require adjustment in this population.

SESSION 1430 (POSTER)

DEPRESSION

POSITIVE ADAPTATION, ACTIVITY PARTICIPATION AND SPIRITUALITY: EFFECTS OF COPING STRATEGIES ON DEPRESSIVE SYMPTOMS AMONG AFRICAN AMERICAN AND WHITE RESIDENTS OF CONGREGATE HOUSING

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Self-reported coping strategies and the relationship of types of coping to depressive symptoms among African American and White residents of six independent living or assisting living facilities were examined. The following research questions were addressed: How do older adults who live in congregate housing report coping with stressors of aging? Does self-reported coping differ between white and African American older adults? Finally, do coping strategies directly affect the level of depressive symptoms experienced, taking into account potentially important individual differences? Five coping categories emerged from two open-ended questions about how older adults cope with aging in congregate housing: a) Positive adaptations, b) Socio-emotional support, c) Instrumental support, d) Activity participation, and e) Spiritual or religious coping. Scores on the Geriatric Depression Scale (GDS) were similar for African Americans and whites. Similar proportions of these two groups reported each coping type, with the exception of spiritual coping (reported by 25% of African Americans compared with 9% of whites). Hierarchical multiple regression analysis examined the associations of the coping categories to depression, after controlling for demographic and health variables related to depressive symptoms, measured by GDS scores. Positive adaptations and activity participation were the only coping strategies that demonstrated independent effects on depressive symptoms. Regardless of age, gender, health status, marital status or race, older residents of congregate housing who can adapt to their current living circumstances and take advantage of activities offered may avoid depressive symptoms. Active, problem-focused coping competencies may decrease the likelihood of depression among vulnerable older adults.

NON-PHARMACOLOGICAL INTERVENTIONS FOR TREATMENT OF POSTSTROKE DEPRESSION: A REVIEW OF LITERATURE

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Stroke is a devastating crisis. It is the third leading cause of death and the number one cause of long-term disability. Each year about 700,000 people suffer a new or recurrent stroke in the United States and over 150,000 of victims die. Seventy five percent of annual stroke victims are over the age of 65. Poststroke depression (PSD) is a common consequence of stroke with the estimated prevalence ranging from 25%-79%. Depressed elderly patients see their primary health care provider more frequently; have higher rates of emergency room visits, and longer hospital stays than their younger counterparts. While there have been

several studies investigating the impact of pharmacological interventions (i.e. drugs) on PSD, there is a significant gap in research on non-pharmacological measures. The purpose of this paper is to present the results of a critical review of literature focused on the efficacy of non-pharmacological interventions for treatment of PSD. Key words used were "Stroke" and "Depression." Subcategories under depression were "Treatment" including "drug" or "non-medication" and limited by age ≥ 65 . Search engines utilized were Medline, CINAHL and Psychinfo, limited to 2000-2008. Several important articles from reference lists of relevant articles were identified. Eliminating pharmacological treatments resulted in 15 articles. The result of this critical review suggest that although psychosocial interventions have not been extensively studied, the preliminary findings indicate a promise of reducing depressive symptoms in stroke population.

BEHAVIORAL ACTIVATION THERAPY TO MANAGE DEPRESSION IN OLDER ADULTS WITH DIABETES

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Type II diabetes is one of the most common chronic diseases among older adults in the United States. Research suggests that the occurrence of depression is significantly higher in individuals with diabetes compared to the general population. The onset of depressive symptoms may make diabetes self-care activities more challenging, and may influence one's ability to comply with medication regimens, exercise routines, nutrition plans, and glucose monitoring tasks. Research literature suggests that depression management interventions can produce better diabetes related outcomes, increase individual life-expectancy, and improve quality of life. The standard treatment for managing depression is the use of anti-depressant medications. However, these medications are often associated with unwanted side effects, particularly in older adults. An alternative intervention for managing depression is Behavioral Activation (BA). Behavioral Activation is an empirically supported treatment that has comparable effectiveness to antidepressant medications, but does not produce undesirable side effects. Behavioral Activation involves focusing on the relationship between meaningful activities and changes in mood. This treatment emphasizes the role that contextual and behavioral factors play in contacting environmental rewards that have an antidepressant effect. This treatment focuses on tailoring interventions to an individual's specific needs, and giving people the tools to become more active and engaged in their life. An overview of the BA model will be presented, as well as specific applications to working with clients with diabetes. Data will be presented from an ongoing research study using BA with individuals that have diabetes and depression.

CHRONIC DISEASE AND HEALTHY LIFESTYLE AS A FUNCTION OF DEPRESSION SYMPTOMS, 2003 BRFS

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Current depression and its association with modifiable healthy lifestyle behaviors, use of preventive services, having a healthy weight, and presence of chronic health conditions were examined among adults ≥ 65 years-old. Participants ($N=45,534$) were obtained from the 2006 Behavioral Risk Factor Surveillance System (BRFSS), a list-assisted random-digit-dialed telephone survey of the noninstitutionalized U.S. adults. The Patient Health Questionnaire 8 (PHQ-8) was completed to assess current depressive symptoms (PHQ score ≥ 10) and information about self-reported modifiable healthy lifestyle behaviors (not smoking, consuming ≤ 1 alcoholic beverage per day, participating in moderate-to-vigorous physical activity during the average week), use of preventive services (receiving an annual influenza immunization and ever receiving a pneumococcal immunization), having a healthy weight (body mass index $18.5-24.9\text{kg/m}^2$), and chronic health conditions (asthma, heart diseases, diabetes) was obtained. People with current depressive

symptoms were less likely than those without current depressive symptoms to be nonsmokers, to participate in moderate-to-vigorous physical activity during the average week, and to consume ≤ 1 alcoholic beverage per day. People with current depressive symptoms were more likely to have more chronic health conditions than those without current depressive symptoms. However, no differences were found for the consumption of alcoholic beverages, having a healthy weight, receiving an annual influenza immunization, and ever receiving a pneumococcal immunization. Older adults with current depressive symptoms were less likely to engage in many health behaviors and have more chronic health conditions than those without current depressive symptoms, having implications for the delivery of preventive services and the management of chronic disease.

DEPRESSED NURSING HOME RESIDENTS' ACTIVITY PARTICIPATION AND AFFECT AS A FUNCTION OF STAFF POSITIVE ENGAGEMENT

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Nursing homes often provide limited opportunity for meaningful engagement in fulfilling activities. Lack of engagement may be a critical factor in maintaining negative affective states that are prevalent in nursing homes. Often residents obtain most of their social contacts from staff members. We present intra-individual correlations among positive staff engagement, resident affect, and resident activity participation from behavior stream observations of residents who were participants in an ongoing trial of an intervention for depression. Residents had been observed for at least 12 weeks. Five minute observations occurred randomly on weekday mornings and afternoons, 6 times a week. Positive staff engagement during the observations was significantly correlated with resident engagement/interest for all residents except one. Positive staff engagement was also related to resident pleasure during the observations for most. Positive staff engagement was strongly related to resident participation in organized group activity; only for a few residents was positive staff engagement related to informal group activities. However, residents tended to be more engaged and show more pleasure when in informal group activities. Positive staff engagement was not related to resident participation in activities of daily living, which is surprising given that much staff contact occurs during such activities. In sum, when residents experience positive staff attention, they are more engaged and experience more pleasure. They are most likely to receive positive staff attention in organized group activities, but residents appear to enjoy and be more interested in informal group activities. Results have implications for enlisting staff help with interventions for depression.

A STUDY OF WELL-BEING AND DEPRESSION IN COMMUNITY DWELLING ELDERLY

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The dual purpose of this study was to assess the prevalence of depression in a sample of elders who live independently in the community, using the Geriatric Depression Scale (GDS), and to test the ability of the simple Well-Being Picture Scale (WPS) to screen for depression in this population. The sample consisted of 215 community dwelling older adults who were attending lunch at Senior Centers in a non-urban county in upstate New York. The range of scoring for the GDS is 0-15, with a score of 5 or above suggesting risk for depression and a score of 11 or higher indicating depression. The scoring range for the Well-Being Picture Scale (WPS) is 10-70, with 70 indicating a high sense of well-being. The sample was 64% female and 36% male, with a mean age of 75.8 years and a range of 55-97 years. One-fourth of the sample scored within the range of concern for depression: 39 (18%) scored 5 or higher on the GDS, suggesting risk for depression; twelve (5%) scored 9 or higher

on the GDS, raising serious concern for depression; and 7 (3 %) scored 10 or higher on the GDS, indicating the presence of depression. The scores of the two instruments were significantly negatively correlated ($r = -.585$; $p = .01$), providing evidence that the WPS is a reliable screening device for depression in independently dwelling elders. This study was supported in part by a Robert Wood Johnson Community Development Grant.

DEPRESSED OLDER ADULTS IN THE UNITED STATES: WHO IS AT RISK FOR DEPRESSION?

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Depression is one of the most prevalent, serious psychiatric disorders in the United States. The present study was designed to examine risk factors for depression among older adults. Demographic characteristics, physical health-related factors (i.e., number of chronic conditions, difficulties in mobility, and self-assessed health), and mental health-related factors (i.e., any anxiety disorders, any substance disorders, and self-assessed mental health) were considered as potential risk factors for depression. Using a nationally representative sample drawn from the Collaborative Psychiatric Epidemiology Surveys (CPES), 3562 older adults were selected for the present analysis. Results from logistic regression analysis showed that the likelihood of being depressed was increased with poor physical health (i.e., having more chronic conditions, difficulties in mobility, and poor self-assessed health). Having poor mental health was identified as an important set of risk factors for depression: older adults with any anxiety disorders and poor self-assessed mental health were more likely to be depressed. The findings demonstrate the distinct physical and mental health-related correlates of depression among older adults.

TRAJECTORIES OF DEPRESSION AND THEIR RELATIONSHIP WITH HEALTH STATUS AND SERVICE USE

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This longitudinal study was conducted between 1994 and 2004 in a cohort of southern Taiwan community-living elderly residents. The study aims to explore the trajectories of depression and how these patterns differed between respondents who survived and those who died during data collection phases; this study also investigated how health status change and health/social service use predicted the different trajectories of depression. Depression, chronic disease, disability and health/social service usage data were collected over six waves. Clusters of depression were used to define a categorical response variable. Baseline levels and new occurrences of chronic disease and disability, and the frequency of health/social service use during this period were chosen as the predictors of depression trajectories. Changes in levels of depression during the ageing process were identified. Different trajectories clearly reflected heterogeneity within depression and the association with mortality. The study highlighted that diabetes, gastrointestinal problems, heart disease and disability, whether at baseline or as new occurrences, were predictors of health decline. High use of health/social services were also predictive of increased depression. These findings identified depression as a highly dynamic process, characterized by different trajectories of depression between states of no, mild and severe depression. Greater

awareness of these various trajectories should potentially improve the prevention and/or management strategies of depression.

GENDER DIFFERENCES IN THE TRAJECTORIES OF DEPRESSIVE SYMPTOMS AMONG OLDER JAPANESE

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This research examines the trajectory of depressive symptoms among older Japanese with a focus on gender differences. Data came from the National Survey of Japanese Elderly, which involves a national probability sample of Japanese aged 60 and over at the baseline in 1987, which was followed up in 1990, 1993, 1996, 1999, 2002, and 2006 with periodic supplements of respondents. The dependent variable was a six-item count CES-D (range 0 to 6) of negative affect and somatic symptom items. Hierarchical linear models with time-varying covariates were applied to examine changes in depression over a period of nineteen years for 3,992 self respondents. Linear, quadratic, and cubic functions were evaluated with the linear specification fitting the unconditional model best (intercept = 1.039***; linear slope = .038***) indicating that on average the number of depressive symptoms increases slightly over time. Females reported a significantly higher level of depressive symptoms, but there were no gender differences in the rate of change. Time varying covariates (i.e., lagged measures and/or change scores) for marital status, financial strain and physical health were associated with greater depressive symptoms. Interestingly, the effect of being married on depressive symptoms was less beneficial for women relative to men. The effect of functional status on depression was smaller for women than men.

DEPRESSIVE SYMPTOM CLUSTERS AND THE RELATIONSHIP TO COGNITIVE FUNCTIONING

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A complex relationship exists between depression and dementia, with high comorbidity between the two diagnoses. There are theories that depression causes dementia and conversely that dementia causes or is a prodromal symptom of depression. Data were drawn from the Duke EPESE, a multi-center investigation of community-dwelling older adults to determine if depressive symptom clusters on the Center for Epidemiological studies of Depression (CES-D) were differentially predictive of cognitive decline (CD) at different points in time. The CES-D is represented by four factors: depressed affect (DA), positive affect (PA), somatic complaints (SC), and interpersonal problems (IP). At baseline, higher DA, SC, and IP- but not lower PA- were related to poorer cognitive functioning. The same clusters predicted CD three years later. These factors may represent prodromal signs of dementia or factors that may be a reaction the initial loss of cognitive abilities. Additionally, poorer cognitive functioning at baseline was related to greater IP three years later, indicating that IP may be a specific reaction to declining cognitive abilities. Lastly, over the course of ten years, greater DA was the only symptom cluster to predict poorer CD. Therefore, consistent with the theories that depression may cause CD, it appears that DA may be a key factor in the etiology of dementia. Depression may manifest differently during different points in time in relation to cognitive functioning. These findings may have implications for treatment and identification of at-risk individuals.

THE RELATION BETWEEN SELF-DISCLOSURE AND SUICIDE IDEATION IN YOUNGER AND OLDER ADULTS

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Self-disclosure, the ability to communicate feelings, is theorized to be an essential part of mental health and well-being. Previous research indicates that lack of self-disclosure may be an important factor in the development of serious suicidal behavior. Low levels of self-disclosure have been found to differentiate among individuals with serious suicide attempts, non-serious suicide attempts, and suicide ideation. The current study examined the relation between self-disclosure and suicide ideation in young and older adults. Participants were 88 older adults and 637 college students. Levels of self-disclosure, averaged across all relationships, were similar for men, $M = 2.03$, $SD = .41$, and women, $M = 2.14$, $SD = .34$, and for older adults, $M = 2.03$, $SD = .33$, and younger adults, $M = 2.12$, $SD = .38$. Self-disclosure was negatively correlated with suicidal ideation in both older adults, $r = -.18$, $p = .11$, and younger adults, $r = -.11$, $p < .01$; the correlations were small and therefore not significant in the smaller sample of older adults. Regression analysis in the full sample revealed a significant interaction with gender. Among women, a higher level of self-disclosure was associated with less reported suicidal ideation, $F(1,465) = 14.74$, $p < .0001$, whereas for men, there was no significant effect, $F(1,219) = .06$, $p = .81$. This pattern was found in the older and younger adult samples, but effects were not significant in the smaller older adult sample. The relation between self-disclosure and suicidal ideation differs by gender across the lifespan.

DETECTION OF DEPRESSION IN OLDER ADULTS BY FAMILY AND FRIENDS: GAUGING THE EYE OF THE BEHOLDER

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Depression is often missed in primary care. Friends and family informants might be attuned to depressive symptoms in older adults and aid the diagnostic process. We examined the accuracy of informant-reported mood disorder in patients 65 years and over, hypothesizing that the accuracy of informant reports would vary with informant personality and attitudes toward depression. Gold-standard psychiatric diagnoses were established based on a review of medical records and a structured interview with the patient. Informant diagnostic accuracy was defined in terms of sensitivity and specificity. Sensitivity refers to the proportion of lifetime mood disorders correctly identified by informants. Specificity refers to the proportion of patients without a lifetime mood disorder correctly identified by informants. We conducted multivariate analyses predicting sensitivity and specificity. Predictors of interest were informant personality (assessed by NEO-FFI) and informant attitudes toward depression, including beliefs in a biomedical model of depression (e.g., "I believe depression is a medical problem") and emotional acceptance (e.g., "people who have emotional problems are not to blame"), rated on a 5-point scale. Mean patient age was approximately 75; mean informant age was approximately 61. Most patients (65%) and informants (71%) were women. Higher informant scores on the emotional acceptance scale were associated with better sensitivity (Beta = 1.36, 95% C.I. = .09, 2.6) and specificity (Beta = .36, 95% C.I. = .02, .69). Informant personality was not associated with accuracy. Friends and relatives of older adults who are emotionally accepting of mental illness will provide more valid reports about mood disorders in primary care.

THE BIASING EFFECTS OF AGE AND HEALTH ON A 10-ITEM SHORT FORM OF THE CES-D

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Past research has identified item bias in the CES-D due to the effects of age and disability. As a result, depression scores are likely to vary due to differences in these extraneous factors rather than to a change in the level of depression per se. Since the CES-D has been shown to contain a first-order factor that taps somatic effects, the potential for bias by health and age on these somatic items is substantial. The purpose of the present study was to evaluate a 10-item short form of the CES-D to determine if there was item bias associated with health and age, particularly with respect to the somatic items of the scale. A secondary goal was to provide a more rigorous test of the differential effects of age and health on depression (net of item bias), since previous studies did not include global measures of health or adequate variation on age. Confirmatory factor analyses suggested a three-factor structure for this short form of the CES-D. Next, a MIMIC model was estimated individually for each of the 10 items. The results indicated that self-rated overall health had a residual bias on four of the five somatic items, but no bias with respect to the items tapping dysphoria or positive affect. Age exerted a unique biasing effect on two of the items tapping positive affect and on one somatic indicator. In addition, there was a direct effect for health on all three first-order factors; age affected only the somatic factor.

A PILOT STUDY OF A BEHAVIORAL ACTIVATION GROUP THERAPY PROTOCOL IN A STATE GEROPSYCHIATRIC FACILITY

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More than 2 million of the 34 million Americans age 65 and over experience some form of depression each year. Behavioral activation therapies strive to bring individuals into contact with positive reinforcement in their environment through increasing participation in pleasant, personally rewarding activities. Very few studies to date have examined behavioral activation therapies in state psychiatric facilities, especially with older adults. In the present study, five patients at a state-run geropsychiatric inpatient facility participated in pilot testing of a manualized behavioral activation group therapy protocol to alleviate depression (age range 66-75). All participants scored at least 9 on the Geriatric Depression Scale and at least 20 (adjusted for education) on the Telephone Interview for Cognitive Status-modified, indicating at least mild depressive symptoms and no more than mild cognitive impairment. The protocol consisted of 8 30-minute group therapy sessions, in which participants selected goals, chose activities based on those goals, and tracked participation in their chosen activities. The group met 4 times per week for two weeks. This pilot study indicates that patients at a state geropsychiatric facility can participate successfully in a behavioral activation therapy group. Four of 5 participants were able to successfully track their participation in activities. At the conclusion of the pilot group, three participants no longer met criteria for inclusion in the study, as their GDS scores had dropped below 9. One participant experienced a slight improvement on the GDS (2 pts) and one participant worsened slightly.

ROLE OF PERCEIVED SOCIAL SUPPORT IN THE RELATION BETWEEN FUNCTIONAL DISABILITY AND DEPRESSION OVER TIME

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Older adults with functional disabilities are at an increased risk for experiencing depressive symptoms. Studies using cross-sectional analyses have reported that social support mediates the relation between

depressive symptoms and functional disability in older adults. However, few studies have investigated this model over time. The present study used latent growth curve modeling to investigate the potential mediating role of perceived social support within the relationship between disability and depression. Participants (mean age = 74.05, SD = 6.52) were from the Swedish Adoption/Twin Study of Aging, a subsample of the Swedish Twin Registry. Four waves of mailed questionnaires were examined, spanning sixteen years. We analyzed twins ($n = 656$) and co-twins ($n = 678$) separately to cross-validate the results through a nonindependent replication. The overall model yielded a marginal model fit ($\chi^2 = 272.792$, $df = 72$, $p < .001$, CFI = .786, and RMSEA = .065). Level of disability and level of perceived support were significantly related to level of depressive symptoms, ($\beta = -.477$, $SE = .104$; $\beta = -1.664$, $SE = .260$). However, level of perceived support was not a significant mediator. Change in disability predicted change in depressive symptoms in twin 1 ($\beta = -.332$, $SE = .145$), but change in support was not a mediator. In twin 2, the relation between disability slope and depressive symptoms slope was not significant, but the relation between perceived support slope and depressive symptoms slope was significant ($\beta = -1.124$, $SE = .375$). Perceived support did not act as a mediator, but instead may have a direct impact on depressive symptoms.

AGREEMENT BETWEEN SELF-REPORT AND INTERVIEW-BASED DIAGNOSES OF DEPRESSION IN COMMUNITY-DWELLING OLDER ADULTS

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This study compares the rates of depression diagnoses in a sample of 345 randomly-selected older adults dwelling in the Worcester community made using a screening instrument, the Center for Epidemiological Studies Depression scale (CES-D > 17) and using a clinical interview, the Schedule for Affective Disorders and Schizophrenia (SADS) and the Research Diagnostic Criteria (RDC). The CES-D is known to be sensitive but not specific way to assess depression in younger samples; little is known about its sensitivity, specificity, or overall reliability in older samples. Specificity of the CES-D was 82% with respect to SADS/RDC diagnoses of major depressive disorder in our random sample; sensitivity was 89%. The CES-D demonstrated an alarmingly high rate of false positives in this sample: 56%. We examine this high false positive rate in light of the limits of self-reports more generally, and in terms of age-specific biases relating to self-reporting of somatic symptomatology.

REDUCING DEPRESSIVE SYMPTOMS AND BLOOD PRESSURE IN ELDERLY ALZHEIMER'S CAREGIVERS: A BRIEF BEHAVIORAL ACTIVATION INTERVENTION

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The objective of this study was to examine the potential benefits of a brief behavioral activation intervention, known as the Pleasant Events Program (PEP), on reducing depressive symptoms and blood pressure (BP) in elderly Alzheimer's disease (AD) caregivers. In this preliminary study, participants were 24 caregivers (mean age = 73+/-8.2 years) providing in-home care to a spouse with AD. Participants were randomly assigned to a control condition ($n = 11$), in which they received supportive psychotherapy + skills-based information, or the PEP condition ($n = 13$), which emphasized increased engagement in social and recreational activities via structured homework assignments. In both programs, participants received four one-hour individual sessions followed by two "check-in" phone calls to emphasize practice of learned mate-

rial. Repeated measures ANOVA was used to assess pre- to post-intervention change in depressive symptoms (brief CES-D) and BP. For depressive symptoms, results indicated that participants in the control condition did not significantly improve from pre- to post-intervention (mean pre = 12.8+/-4.5; mean post = 11.5+/-5.3; $p=.205$). In contrast, participants in the PEP intervention significantly improved (mean pre = 12.4+/-4.6; mean post = 9.2+/-6.6; $p=.014$), with Cohen's d indicating a medium effect size of 0.50. No group differences were found for change in BP, although a significant main effect of time was found in resting systolic BP ($F=6.76$, $p=.017$), diastolic BP ($F=18.95$, $p<.001$), and mean arterial pressure ($F=15.05$, $p=.001$). These results suggest that the PEP intervention is potentially efficacious for reducing depressive symptoms in AD caregivers.

VASCULAR RISK AND MAJOR DEPRESSION IN OLDER PRIMARY CARE PATIENTS RECEIVING MENTAL HEALTH TREATMENT

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Introduction: The vascular depression hypothesis contends that vascular disease can "predispose, precipitate, or perpetuate" depressive syndromes in late-life. Findings on vascular depression treatment outcome are mixed. This project examined the role of vascular risk on treatment outcome in older adults with depression. **Methods:** Secondary analysis of data from the Primary Care Research in Substance Abuse and Mental Health for the Elderly (PRISM-E; Levkoff et al., 2004) study were utilized. Participants with baseline MDD and in mental health care were included in the analyses ($n=819$). Self-report vascular risk factors included hypertension, diabetes, heart trouble, atherosclerosis, and smoking. Depression diagnosis was based on psychiatric interview. Three-month outcome was defined by the absence or presence of MDD. In addition to univariate analyses, multivariate logistic regression was used to examine the effect of vascular risk (low/high) on depression outcome while accounting for additional factors related to depression (i.e., medical conditions, anxiety disorder). **Results:** Thirty-seven percent of participants with low vascular risk attained remission at follow-up compared to only 27% of those with high risk ($p=.018$). However, in the multivariate model, number of comorbid medical conditions, physical function, baseline anxiety disorder diagnosis, and baseline depression severity independently predicted outcome, while vascular risk did not. **Conclusions:** Findings suggest that depression outcome is better accounted for by factors such as comorbid anxiety or medical conditions. That said, future research should further examine the relationship between vascular risk and depression outcome using broader risk factor profile while also accounting for the role of cognitive impairment (i.e., executive dysfunction).

DEPRESSIVE SYMPTOM PROFILES AS PREDICTORS OF TRAJECTORIES OF FUNCTIONAL LIMITATIONS IN OLDER ADULTS

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The purpose of this research was to explore longitudinal outcomes associated with profiles of depressive symptoms. Using data from the Duke Established Populations for Epidemiologic Studies of the Elderly (EPESE), a sample of 4162 adults 65+ followed for up to 10 years, we used latent class analysis to identify discrete clusters of participants who shared similar profiles of depressive symptoms at the time of the baseline survey. Depressive symptoms were measured using a modified version of the CES-D. Functional limitations included 5 items measuring basic activities of daily living (ADLs), 5 items measuring instrumental

ADLs, and 3 items measuring mobility. A model with four clusters provided the best fit to the data. Those in Cluster 1 (56%) had few depressive symptoms while those in Cluster 4 (11%) had the highest probability of endorsing each of the 20 items. Those in Cluster 2 (18%) endorsed primarily somatic symptoms while those in Cluster 3 (15%) endorsed primarily negative affect symptoms. Using a repeated measures mixed model controlling for age, sex, marital status, race, education, health status and cognitive functioning at their baseline status, cluster membership was a significant predictor of functional status over time. While the average trajectory for each cluster showed an increase in functional limitations, the trajectories for Clusters 2, 3 and 4 showed a steeper increase in limitations and were significantly different from the trajectory for Cluster 1. Negative affect symptoms and somatic symptoms alone as well as in combination can predict an increase in functional limitations over time.

SESSION 1435 (SYMPOSIUM)

EVERYTHING OLD IS NEW AGAIN: CURRENT APPROACHES IN AGING AND PERSONALITY

Chair: S.K. Whitbourne, Psychology, Univ. of Mass.Amherst, Amherst, Massachusetts

Discussant: U. Staudinger, Psychology, Univ. of Mass.Amherst, Amherst, Massachusetts

The field of personality and aging forms one of the hallmark areas of psychological gerontology, and can be traced back to the landmark works of such prominent theorists as Erikson, Neugarten, Havighurst, Britton, and Buhler. Their theories of adaptation and aging formed the cornerstone of numerous studies published in the 1950s and 60s. In recent decades, research and theories have moved away from these traditional approaches, particularly with the advent of other theories and models, which cover much of the same ground, but emphasize issues as personality traits and their relationship to health and behavior. The purpose of this symposium is to trace the evolution of the field and to point to the continuities with these earlier approaches in contemporary views. Presenters will discuss, within their own areas of expertise, the benefits of integrating the "old" to the "new." The session will include presentations that focus on successful aging, stress and coping, and personality. Chiriboga and co-authors will link stress research to its roots in Selye, Holmes and Rahe, and Lazarus. In addition to life events and stress, they will examine the role of acculturation. Mroczek and co-authors will examine affect balance, stress reactivity, and mortality in longitudinal data from the Normative Aging Study, applying methods that model within-person variation. Finally, Whitbourne and Mathews will trace the evolution of personality research from the work of Neugarten, Britten, and Lowenthal, examining the concept of pathways of development within a longitudinal data set examining psychosocial development from college through midlife.

AFFECT VARIABILITY PREDICTS MORTALITY

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Research on psychological well being has a long heritage, going back at least as far as the life satisfaction scales of Neugarten and colleagues. Subsequent work on well-being has focused more on the latter's positive and negative domains. In the current study, we looked at the balance between negative and positive affect as well as stress reactivity—itsself with a long history—to predict mortality. We used 333 older men and women from the Normative Aging Study who participated in an 8-day daily diary study conducted in 2004. Of the 333 participants, 21 died from 2004 to 2007. Daily negative affect predicted mortality, as did the affect balance (ratio) of positive to negative affect. Additionally, stress reactivity predicted mortality. Within-person slopes that quan-

tify the daily association between stressors and negative affect were used to estimate stress reactivity, and these slopes were significantly predictive of mortality. Those who were more reactive were more likely to die. Findings are consistent with Neugarten's argument that affect is central to well-being.

TRACING PERSONALITY PATHWAYS THROUGH ADULTHOOD: REVIVING "PATTERNS OF AGING"

S.K. Whitbourne, M.J. Mathews, *Psychology, Univ. of Mass. Amherst, Amherst, Massachusetts*

The concept of personality pathways can be traced to the work of Neugarten, Havighurst, and Tobin (1965) who presented data suggesting that adaptation to aging varies by personality "type," referred to as "patterns of aging." In previous research, pathways of psychosocial development were examined in 182 midlife adults followed from college through the late 50s. Five pathways were identified corresponding roughly to four of the Neugarten et al personality types. A pathways questionnaire based on this research was administered to 140 midlife relatives of students in a psychology of aging class. Additionally, those students completed the questionnaire based upon their perceptions of the adult participant; congruence between participants and relatives in pathway ratings were used as a means of contrasting self with other perceptions of adaptation. Advantages of using these ratings to supplement self-report will be discussed in terms of understanding defensiveness and adaptation, concepts central to Neugarten's early work.

THE MANY FACES OF STRESS: A STUDY OF DIVERSE RACIAL/ETHNIC GROUPS

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This paper links a current application of stress research to its historical roots, beginning with Selye's 1950s studies of physiological stress and the associated General Adaptation Syndrome. Others whose work continues to exert an influence include Holmes and Rahe (who developed an early life event inventory in the 1960s) and Lazarus (who developed hassles and coping scales in the 1970s). More recent studies have focused on chronic strain, as well as the physiological consequences of stress. Drawing on this past work the present investigation includes measures of acute and chronic stressors, but also proposes that level of acculturation can be considered as a source of both. A statewide study (N = 1,433) in Florida sampled older non-Hispanic Whites, Blacks, Cuban Americans, and other Hispanics/Latinos. Results indicate the continuing relevance of classic stress measures for mental and physical health status, and ethnic/racial differences in exposure and its consequences.

SESSION 1440 (SYMPOSIUM)

FAMILY TRANSITIONS IN LIFE: MAINTAINING RESILIENCE AND CREATIVITY DURING PALLIATIVE CARE

Chair: R.S. Allen, *Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama*
Discussant: W.E. Haley, *The University of South Florida, Tampa, Florida*

Although health decline is a ubiquitous aspect of living through the course of palliative care, older adults and their families display resilience during periods of transition by employing positive coping strategies. These coping strategies serve to maintain the patient's life message for future generations through generative and creative activity. This symposium explores individual and family transitions during the receipt of palliative care and engagement in a psychosocial community-based intervention called LIFE. First, continuing assessment of patient reported outcomes via paper-and-pencil or computer-based assessment in one outpatient clinic will be reported. These outcomes may be used to refer palliative care patients to further psychosocial interventions such as

LIFE. Second, a grounded theory approach explored outcomes reported by intervention dyads in the original Legacy Project (Allen et al., 2008), designed to decrease palliative caregiving stress and improve patient quality of life. Using the constant comparative method, identified themes include the search for meaning and the importance of continuing the life story through creative activity. Third, process data from the Legacy Project were reviewed for suggestions on improving this family-focused intervention. Families reported that receiving training materials prior to the first intervention session would be helpful in completing the activity. Finally, initial data regarding recruitment, retention, and success of retired senior volunteers as Legacy interventionists with community-based palliative care patients and caregivers in the LIFE project will be presented. Discussion will address family transitions and the benefits of and barriers to engagement in psychosocial interventions near the end of life.

WHAT'S IMPORTANT? PERSONAL AND FAMILY LEGACY DURING FAMILY TRANSITIONS

R.S. Allen, K.L. Payne, C. Lowery, *Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama*

We identify themes emerging during mutual reminiscence from the first session of the Legacy Project intervention, designed to decrease caregiving stress and increase family communication among individuals with chronic, life-limiting illnesses and their family caregivers living in the community. Two researchers coded transcript data with fourteen dyads using the constant comparative method. Fifty-seven percent of participants were parent-child dyads. Themes corresponded with two of the four tenets of Legacy Theory: (a) the search for meaning and (b) generativity - the importance of sharing life lessons for personal and familial continuity. These themes emerged as the dyads planned to engage in a creative activity (Legacy Theory tenet three) to produce a product representing the palliative care patient's life message. As older adults begin to lose physical functioning through disease processes or normal aging, interventions focusing on the ways in which these individuals can still contribute to family life are increasingly important.

USING FAMILY-BASED INTERVENTIONS TO OPTIMIZE RESILIENCE IN PALLIATIVE PATIENTS AND THEIR CAREGIVERS

R.S. Pruthi, L.L. Dunn, *Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama*

The literature has demonstrated a definite link between chronic stress and diminished resilience (i.e. decreased immunity, hypertension, heart disease, stroke, Alzheimer's, and depression). Palliative patients and their family caregivers are a high-risk group for diminished resilience. Legacy interventions are family-based life review and creative activity projects that decrease caregiving stress, increase family communication, and diminish symptom burden among palliative patients. We reviewed treatment process data (N=31 dyads; Response rate=.7) from the Legacy Project (K01AG00943). Of the 14 treatment dyads, 9 dyads reported the intervention helped in relieving stress and found the coping strategies "very helpful." Suggestions for improvement included providing informational materials to treatment families prior to the initial intervention session. Facilitating resilience can improve physical and psychological attributes of patients and caregivers living in the community with life-limiting chronic illness. Future research is needed to refine the intervention for use by lay-persons such as community based volunteers.

MEASURING PATIENT REPORTED OUTCOMES IN PALLIATIVE CARE BEHAVIORAL STUDIES: RECEPTIVENESS TO COMPUTER-BASED APPROACH

E. Kvale^{2,1}, L. Lloyd², S. Meleth², H. Kuo², C. Huang², C. Ritchie², I. Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama, 2. The University of Alabama at Birmingham, Birmingham, Alabama

The routine assessment of patient reported outcomes (PRO's) often generates important primary or secondary endpoint data in behavioral studies in palliative care populations. Specifically, response burden has been identified as a crucial factor of instrument selection and data collection methodology. To explore the impact of response burden on PRO's in palliative care populations, we undertook a randomized controlled trial to compare computer-based assessment to paper and pencil assessment of PRO's in an outpatient palliative care clinic between April and December 2008. Sixty participants were randomized into two groups to complete a battery of patient self-report instruments using a paper and pencil approach (N=30) or a computer kiosk with a web-based application that presented the same battery (N=30). Factors related to reducing response burden were analyzed by using age as a predictor variable. Findings on selecting suitable assessment approach and referring palliative care patients to further psychosocial interventions will be presented.

SENIOR VOLUNTEERS AS INTERVENTIONISTS IN A LEGACY INTERVENTION

E.L. Csikai, H. Shin, Psychology/Center for Mental Health and Aging, The University of Alabama, Tuscaloosa, Alabama

Reminiscence and life review interventions are often used with older adults and those experiencing severe chronic and life-limiting illnesses. Legacy activities and other types of family exchanges can increase life satisfaction and perception of meaningful life for individuals and their family caregivers (Allen, et al., 2008). Typically such interventions are implemented by trained mental health professionals making its benefits out-of-reach for many who do not encounter such trained personnel during the course of illness. Following a community partnership participatory action research model, the Legacy Intervention Family Enactment (LIFE) project is assessing the efficacy of the Legacy intervention delivered by trained senior volunteers. Recruitment, including informational sessions and focus groups with community senior volunteers was followed by professional training sessions including content volunteers identified as important for success. Positive outcomes are realized by all involved in the process: older adults with life-limiting illness, family caregivers, and the senior volunteers.

SESSION 1445 (SYMPOSIUM)

GLOBALIZING GERONTOLOGY: CULTURE IN THE CLASSROOM

Chair: S.R. Kunkel, Scripps Gerontology Center, Miami University, Oxford, Ohio

With a sharpened focus on global aging and increased attention from around the world to issues of aging, the field of gerontology is benefiting from growing opportunities for international education and cross-national research collaborations. In light of this significant trend, it is useful to reflect on the extent to which our international commitments are reflected in cultural awareness and sensitivities. In this symposium, we will explore the cultural norms that international students bring with them to gerontology classrooms in the U.S.; learn about the experiences of international and U.S. students in a culturally diverse gerontology classroom; and review successful strategies for creating an inclusive, participatory atmosphere in the classroom. Specific topics for the symposium include: classroom behavior norms regarding eye contact, non-verbal cues, participation, and peer communication; the impact of hier-

archy within educational systems on interactions between faculty and students; expectations for writing papers; using discussions about aging-related policies as effective instruction and as a formal invitation to participate in classroom dialogue; and, establishing common gerontology language among students from countries in which terms such as volunteerism, discretionary time, nursing home, family caregiving, and pension scheme have vastly different meanings and connotations. Presenters include gerontology students and faculty from different parts of the world. The symposium will include time for input from those in attendance regarding their own experiences, challenges, and strategies for creating and participating in an inclusive classroom.

FROM AN INTERNATIONAL STUDENT TO A FACULTY MEMBER TEACHING INTERNATIONAL STUDENTS: A PERSONAL JOURNEY

B. Wu, Gerontology, University of North Carolina at Greensboro, Greensboro, North Carolina

International students are a visible and valuable component of the student body on campus in the U.S. From faculty perspective, it is important to create a supportive and culturally sensitive classroom for students and work with students in order to overcome barriers to learning. In this presentation, the author shares her professional experience of working with students and her personal experience as an international student in the past. Taken together, her experiences suggest that the following strategies are critical in effectively educating and mentoring international students: (1) understanding the challenges students face, (2) sensitivity to students' cultures of origin, (3) encouraging students to arrange individual meetings with their instructor, (4) making certain that students comprehend the lectures and questions discussed during class, and (5) making concerted efforts to encourage students to feel comfortable participating in class discussions.

CULTURAL CLASHING AND CULTURAL LEARNING: LESSONS FROM THE INTERNATIONAL CLASSROOM

F. Whittington, George Mason University, Fairfax, Virginia

The international classroom is quickly becoming the norm in American universities. Gerontology courses seem no exception, especially on those campuses that have active international programs of research or global recruitment efforts. When students from different cultures mingle in the classroom, especially when the instructor is culturally unaware or attempting to be culturally neutral, the potential exists for misunderstanding, mis-learning, and personal embarrassment for both majority and minority students. However, insightful, culturally competent instructors can help students avoid such failures and turn clashing expectations into opportunities for learning, understanding, and appreciation. I will present three strategies gerontology instructors can use to transform classroom differences into learning opportunities: 1) present personal philosophy of education and expectations for classroom behavior and performance; 2) present personal view of cultural difference and global awareness; and 3) acknowledge, identify, and discuss cultural differences among students in career and educational goals and classroom styles.

WHAT NOW?: INTERNATIONAL STUDENTS' PERSPECTIVES ON CULTURE IN THE GERONTOLOGY CLASSROOM

J. Liang, S. Mwangi, Sociology and Gerontology, Miami University, Oxford, Ohio

In this presentation, international students will describe their experiences in U.S. gerontology classrooms, with a focus on the surprises and challenges of learning the student role in a new culture. Panelists will discuss the expectations they brought with them regarding norms of classroom participation, formal and informal interactions with peers and professors, and the interpretation of non-verbal cues. Presenters will also discuss some of the "language of gerontology" that has different

meanings around the world. For example, volunteerism is receiving increasing attention in U.S. and Western European gerontology research. However, volunteerism is not relevant in many cultures, because it depends on the existence of discretionary time as a concept and a commodity, which in turn requires an economic system and a life course dominated by formal paid labor. This presentation is intended to raise awareness about the deep impact of culture on classroom behavior and on the substance of gerontology.

SESSION 1450 (SYMPOSIUM)

GRANDPARENTS RAISING GRANDCHILDREN: 15 YEARS OF RESEARCH, THEORY, POLICY AND PRACTICE

Chair: C. Musil, *School of Nursing, Case Western Reserve University, Cleveland OH, Ohio*

The topic of grandparents raising grandchildren emerged as a focus of research and practice in the mid-1990s. Over the past 15 years, substantial progress has been made in the area of kinship caregiving, including in the policy arena. This symposium brings together four papers on research, theory, practice and policy about custodial grandparents to provide a "state of the science" in each of these domains. The first paper, by Esme Fuller-Thomson, draws on her secondary analyses of national data sets to summarize the current state of knowledge on custodial caregivers' health and well being, with an emphasis on racial/ethnic and cultural variations. The second paper, by Bert Hayslip, considers the theoretical perspectives that have been used to frame research on grandparents raising grandchildren. He identifies ongoing theoretical questions and analytical issues requiring attention in order to advance research in the area. The third paper, by Fred Strieder, discusses the research and practice interface, and the innovations in service delivery models to meet the unique needs of grandparent caregivers. In the fourth paper, Donna Butts and Jaia Lent from Generations United document the progress in policy for supporting grandparents raising grandchildren and other kin caregiver families. Current initiatives and partnerships between caregivers with policy makers are highlighted. In the discussion, Carol Musil weaves together the intersections of theory, research, policy and practice, and underscores the interdisciplinary nature of the field. Future directions for work in this area are noted.

GRANDPARENT CAREGIVING RESEARCH: RECENT PROGRESS & FUTURE PROSPECTS

E. Fuller-Thomson, *University of Toronto, Toronto, Ontario, Canada*

In the past 15 years, there has been a burgeoning of research on grandparents raising grandchildren. This presentation will review this literature focusing on health outcomes and racial and ethnic variations. Particular attention will be paid to factors associated with resiliency. Using the nationally representative 2006 American Community Survey, the author will provide documentation on the important but neglected role played by poverty. There is a clear socioeconomic gradient with the percentage of grandparent caregivers experiencing functional limitations decreasing from 41% for those living in poverty to 11% for those with incomes at 500% or more of the poverty line. Findings indicate that impoverished African Americans have 4.5 times the odds of being grandparent caregivers in comparison to African Americans in the highest income group (OR=4.46). We will discuss practice and policy implications of these findings in light of the current economic crisis and identify important areas for future research.

THEORETICAL AND METHODOLOGICAL ISSUES IN CUSTODIAL GRANDPARENTING RESEARCH

B. Hayslip, *University of North Texas, Denton, Texas*

Despite the growth of research in custodial grandparenting over the past two decades, little attention has been paid to theoretical and methodological issues influencing such work. This presentation will explore

the applicability of numerous conceptual frameworks that might guide such research, emphasizing contextualism, wherein custodial grandparents are understood at multiple levels, consistent with Bronfenbrenner's ecological perspective, and a life span approach emphasizing the understanding of grandparent caregiving in an antecedent – consequent framework, stressing the dual demands of parenting a grandchild and adjusting to the life changes that the acquisition of this new role brings. Methodologically, this presentation will argue that a pluralistic approach to collecting grandfamily data is most desirable, stressing the integration of findings from multiple methods that target grandparent caregivers. The need for prospective, longitudinal data, intervention-based work, and research examining the short-term and long-term consequences of caregiving for both the grandparent and the grandchild will be discussed.

THE INTERFACE BETWEEN RESEARCH AND PRACTICE

F. Strieder, *University of Maryland Baltimore - School of Social Work, Baltimore, Maryland*

Over the past 15 years research on grandparents raising grandchildren families has yielded information about the custodial caregivers and their circumstances, the impact of caregiving, and the benefit to the children living in skipped generation households. This paper will address how the current research interfaces with informed program development and the implementation of designs targeting grandparent-headed families' needs within the context of their own community. It will include the development of practice models that give a clear direction and insight into what must be considered in the provision of services. The presentation will identify the significant risk and protective factors pertinent to grandparent-headed households as well as outcomes to incorporate into program evaluation. Existing service models will be used as examples of current practice strategies that have included an evaluation in their designs.

GRANDPARENTS AND OTHER RELATIVES RAISING CHILDREN: THE STATE OF SUPPORTIVE PUBLIC POLICIES

D. Butts, J. Lent, *Generations United, Washington, District of Columbia*

Public policies to support grandparents and other relatives raising children (or grandfamilies) emerged with the development of child welfare laws and Aid to Families with Dependent Children, however, much of this early policy was not created with grandfamilies in mind. Recognizing that laws were failing to most effectively address their unique challenges and needs, over the last decade Congress has developed federal legislation specifically designed to support grandfamilies such as intergenerational housing laws, the inclusion of grandfamilies in the National Family Caregiver Support Program, and the recently passed Fostering Connections to Success and Increasing Adoptions Act of 2008. States are leading the way for additional supportive policies through the passage of educational and medical consent and specialized custody laws. Research documenting how children fare in relative care, the factors contributing to the phenomena, and effective policies and supportive services is critical to the development of further supports for these families.

SESSION 1455 (SYMPOSIUM)

HEALTHY AGING WITH CREATIVE USE OF SELF REGULATION AND SELF EFFICACY BY OLDER ADULTS

Chair: C. Shawler, *University of Louisville, Louisville, Kentucky*
Discussant: S.Y. Hawkins, *University of North Carolina, Chapel Hill, North Carolina*

Older adults utilize creative ways to regulate their lives to balance biological, social, and psychological functioning. The biological perspective of successful aging is often described as the avoidance of disease or disability. The social psychological perspective of successful

aging involves a process of adaptation. In this symposium, researchers explore older adults' self-regulation of high blood pressure and proactive decision making regarding self efficacy to manage environmental disasters. It is essential to understand how older adults, with health risks, contribute to the community, maintain active productive lives, and sustain their life satisfaction. Nurse scientists have contributed knowledge to facilitate robust healthy aging. High blood pressure self-management strategies of older mothers and adult daughter dyads are the focus of the first paper. Physical functioning and quality of relationship can be indicators for quality of life and symptom control. The second paper reports how older adults are at disproportionately high risk during natural disasters and findings provide essential factors that influence decision making for older adults to manage their lives during imminent natural disasters. The third paper describes recruitment strategies of older adults assisting in elementary schools. Findings indicate that despite health risks in the older population, they maintain involvement in the community and participate in research. The last paper explores how various levels of resources affect family caregivers of people with dementia. High levels of resourcefulness enable caregivers to be prepared and less anxious. All of these papers represent research conducted by participants of the Hartford Institute for Geriatric Summer Scholars Program.

HEALTH RELATED QUALITY OF LIFE WITH OLDER MOTHERS AND ADULT DAUGHTERS: SUBTLE AND IMPORTANT NUANCES

C. Shawler, *Nursing, university of louisville, Louisville, Kentucky*

The purpose of this longitudinal predictive study is to determine the impact of inner strength, perceived control, and quality of the mother-daughter relationship of older mothers and their adult daughters on blood pressure self management behaviors and health related quality of life (HRQOL). In this paper several findings from the first wave of data collected from 37 mothers and 37 daughters will be presented. Measures for this analysis include the Autonomy Relatedness Scale (ARI) for quality of the mother-daughter relationship and the SF-36 for HRQOL. Data were analyzed using paired t-tests. Results indicate a significant difference between mothers' and daughters' total scores on HRQOL but no differences on the total ARI score. Subscale analysis of SF-36 and ARI revealed significant variations. Findings suggest that thorough assessment of physical functioning, perceptions of vitality and quality of relationship are essential to thorough and accurate health care of older mothers and adult daughters.

FACTORS INFLUENCING OLDER ADULTS' WILLINGNESS TO EVACUATE IN TIMES OF DISASTER

J.C. Langan, *School of Nursing, Saint Louis University, St. Louis, Missouri*

Older adults are at a disproportionately high risk during disasters. Hurricane Katrina caused the deaths of at least 506 senior citizens. This study took place on the Gulf Coast of Mississippi. This area represents those most frequently ravaged by tropical storms, hurricanes, and flooding. The modified Rosenkoetter Older Adult Disaster Evacuation Assessment tool was used as well as audio recordings of stories the participants shared about their disaster experiences. Participants were members of three church congregations and two senior centers. Subject characteristics are described using descriptive statistics. The Chi square statistical method was used and Backward Logistic regression to identify the combination effect of various predictors determined by the Pearson Chi Square test as being statistically significant. This presentation will discuss the factors older adults consider when deciding whether they should evacuate or shelter in place during imminent natural disasters.

PREPAREDNESS, DEPRESSION, AND ANXIETY IN FAMILY CAREGIVERS WITH VARYING LEVELS OF RESOURCEFULNESS

E.W. Gonzalez¹, C.F. Lippa², M. Polanski³, *1. Nursing, Drexel University, Philadelphia, Pennsylvania, 2. Drexel U. College of Medicine, Philadelphia, Pennsylvania, 3. Drexel U. School of Public Health, Philadelphia, Pennsylvania*

Background: Approximately 10.4 million family caregivers of people with Alzheimer's and other dementias provide care to their loved ones in the community. Family members assume caregiving responsibilities without preparations. The purpose of this study was to examine the differences between highly resourceful and less resourceful family caregivers on preparedness for caregiving, anxiety and depression. Method: A comparative descriptive design was used on baseline data of 70 family caregivers who were living with and caring for person diagnosed with Alzheimer's disease. The data is part of an ongoing intervention study to enhance resourceful skills in family caregivers. Findings: The results showed that family caregivers with low SCS scores were significantly less prepared, more anxious and reported less gratification in caregiving than those who were highly resourceful. There was no difference in depression between groups. Implications will be discussed. Funded by NINR to Elizabeth W. Gonzalez, PhD (PI)

RECRUITING AND RETAINING HIGH-RISK OLDER ADULTS FOR A HEALTH PROMOTION RANDOMIZED CLINICAL TRIAL

E. Tanner¹, E.J. Tan¹, M. Carlson¹, R. Piferi¹, T. Seeman², L.P. Fried³, K.E. Whitfield⁴, G. Rebok¹, *1. School of Nursing and Center on Aging and Health, Johns Hopkins University, Baltimore, Maryland, 2. University of California Los Angeles, Los Angeles, California, 3. Columbia Mailman School of Public Health, New York, New York, 4. Duke University, Durham, North Carolina*

Experience Corps is a health promotion program in which older volunteers assist in city elementary schools, and health outcomes are evaluated in a randomized controlled trial (RCT). Outcomes of recruiting vulnerable, high-risk older adults to engage in this health promotion program with strong appeal for a diverse, underserved population will be discussed. 1755 older adults were recruited and screened and 534 were enrolled and randomized into this RCT during the first 3 years of the Baltimore Experience Corps Trial. The sample, 85% female, 90% African American, and median age of 67 (60-88), reports the following: 76% hypertension, 32% diabetes mellitus, 12% emergency department visits (past month), 18% one+ falls (past 12 months), 48% smoking (past/current), and median BMI of 31.1. The study findings of recruitment efforts demonstrate the ability to successfully recruit a vulnerable population with significant health risks and behaviors for a community-based health promotion program.

SESSION 1460 (SYMPOSIUM)

HOW DO OLDER MEN'S OVERCOME THE CHALLENGES OF LATER LIFE?

Chair: K.M. Bennett, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Discussant: L.K. Soulsby, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Older men face a variety of challenges in later life including widowhood, caregiving and negotiating identity. This symposium brings together exciting work that considers the ways that masculinity aids men to overcome these challenges. Van den Hoonaard examines how older North American widowers discuss their wives' deaths. She focuses on the modes of speech that enable the men both to discuss these distressing events and at the same time maintain their masculinity. In a British study Bennett and Evans also examine the ways older widowers discuss the immediate events prior to death. They emphasise the ways in

which masculinity is maintained through factual reporting and demonstrations of control and competence. Stelle and Watson examine the coping styles of older widowed men and women and find that the variety of grief and grief-related behaviors is varied. Many widowed men have been carers for their wives prior to death, and Russell's paper focuses on men's caregiving experiences. He examines their narratives and focuses on two masculine characteristics: self-confidence and competence. He highlights the individual and temporal differences in the caregiving context. Finally, Black discusses another feature of masculinity this time amongst older African American men: success. She focuses on both whether these older men view themselves as successful and the ways in which expectations of success have been modified in later life. Soulsby will provide a critical analysis of these papers and the ways in which masculinity assists older men to face the challenges of later life.

WIDOWED MEN'S NARRATIVES OF THE DEATHS OF THEIR WIVES

K.M. Bennett, E. Evans, *Psychology, University of Liverpool, Liverpool, United Kingdom*

Bennett and Vidal-hall (2000) analysed the death narratives of older widowed women. This paper extends that work to those told by older widowers. Interviews with 60 widowers were initially compared with those from 66 widows, with a view to identifying similarities and differences. A key difference was the way in which widowers tell the stories of their wives' deaths within the framework of masculinity. Widowers are found to 'report' the events, describing the deaths in an objective way. When widowers did discuss the emotional aspects of their wives' deaths they did so in subtler and less elaborative ways than widows. Their death narratives highlighted their control over and competence in these death related events. However, it is important to note that the manner in which these death narratives are told can disguise the real emotional impact of their wives' deaths.

BECOMING A WIDOWER: MEN'S STYLES OF TALKING ABOUT THEIR WIVES' DEATHS

D.K. van den Hoonaard, *St. Thomas University, Fredericton, New Brunswick, Canada*

This paper looks at strategies that older widowers used in their narratives about the deaths of their wives during an in-depth interview study. Twenty-six widowers in Atlantic Canada and Florida who were between 56 and 91 years of age participated in the study. The researcher analyzed the interviews using discourse analysis with a symbolic-interactionist perspective. The participants told stories that had definite plot lines which they used to situate themselves as husbands, caregivers, and men. They recounted the discovery of their wives' impending deaths and their own place in the process using the same four modes of speech, factual, familistic, destiny, and agency speech, identified by Kirsi et al. (2000) in their study of men's written stories of caring for their wives. This paper will use quotations from the interview to illustrate the men's use of these four modes of speech and argue that the men used them to assert their masculinity.

PATTERNS OF GRIEF FOLLOWING SPOUSAL BEREAVEMENT: INTUITIVE AND INSTRUMENTAL STYLES OF COPING

C. Stelle, W. Watson, *Gerontology / Human Services, Bowling Green State University, Bowling Green, Ohio*

Studies of bereavement have often treated gender as a variable of interest in the analysis of coping and adaptation but have not adequately examined both the between group and within group variability in how men and women cope with spousal loss. This study examines the patterns of grief experienced by 153 bereaved older adults in the Changing Lives of Older Couples (CLOC) dataset by investigating the experience of loss, expression of grief, and adaptation to grief based on the concepts of intuitive and instrumental styles of coping (Martin and Doka,

2000). Factor and cluster analysis is used to create five patterns of grief and examine differences in outcomes such as well-being, depression, support, and social integration. This study underscores the need for research and intervention to move beyond the gendered stereotypes of what grief should look like to the many variations in grieving and behaviors in response to spousal bereavement.

HOW DO I KNOW IF I KNOW WHAT I'M DOING?: NARRATIVES OF SELF CONFIDENCE AND COMPETENCE AMONG ELDERLY MEN CAREGIVERS

R. Russell, *SUNY Brockport, Rochester, New York*

The complexity of caring for an ill family member is evident in a number of varied ways. For elderly men caregivers, such complexity is further exacerbated by gender scripts and role expectations, yet their experiences remain under examined. Among the increasing ranks of elderly men caregivers are those who care for spouses and partners with debilitating cognitive impairment. For these men, the daunting tasks of caregiving consistently challenge their sense of self confidence which, in turn, impacts perceived competence in their caregiving roles. Data for this paper are taken from an ongoing qualitative study of elderly men caregivers begun in 1997, and explores caregivers' perception of competence relative to their sense of self confidence. Findings from their contextually rich narratives suggest that differing levels of self confidence directly impact perceptions of competence, and that both levels often fluctuate significantly for many caregivers individually, as well as across the entire sample.

LINKS AMONG EXPECTATIONS, PERSONAL SUCCESS, AND WELL-BEING IN AFRICAN AMERICAN MEN

H. Black, *Jefferson Center for Applied Research on Aging and Health, Thomas Jefferson University, Philadelphia, Pennsylvania*

Our paper investigates the relationship between youthful expectations in life, personal meanings of success, and feelings of well-being in a sample group of African American men. We conducted in-depth interviews with 16 African American men, aged 70 and over. Our qualitative methodology elicited in-depth accounts of how individuals, when young, thought their lives would unfold and what "success" meant to them in the past and currently. A finding in our research is how early expectations and notions of success are related to well being in old age. A sense of well-being occurs not only because an individual believes he has achieved success and met or exceeded youthful expectations, but also because, throughout life, he has actively modified expectations and meanings of success in order to maintain or regain well being in late life.

SESSION 1465 (SYMPOSIUM)

INTERGENERATIONAL EXCHANGES IN THE CONTEXT OF OTHER RELATIONSHIPS AND CULTURE

Chair: K. Fingerman, *Purdue University, West Lafayette, Indiana*

Discussant: S.H. Zarit, *Pennsylvania State University, State College, Pennsylvania*

Most support of younger and older generations is provided by middle-aged adults, rather than government programs. Although researchers have documented middle-aged adults' perspectives on support they provide to family members, there has been little attention to relationship contexts of intergenerational transfers or to cultural variability in transfer patterns. This symposium considers these factors. Lee and colleagues compare marital couple's views of support to young adult offspring. By considering each member of the couple's perspective on helping their children, they address implications of the parent and offspring relationship for each spouse's well-being. Greenfield considers the support that grandparents provide to young parents. She finds that different types of support from grandparents mitigate stress for parents in African American, Latino, and White families. Levitzki presents a qualitative narra-

tive analysis of parents' views of intergenerational exchanges in Israel. She considers the subjective meaning parents attribute to providing help to grown children. Finally, Kim and colleagues examine expectations of future inheritance from the perspective of both the aging parent and the middle-aged offspring. By examining each party's expectations of this future event, they are able to understand the final transfer parents may give children in the context of ongoing support patterns. Collectively, these papers provide a more nuanced understanding of intergenerational transfer by considering: (a) support exchanges in the context of other relationships (i.e., grandparents/Greenfield, marital couples/Lee), (b) cultural settings of that support (i.e., American ethnic groups/Greenfield, Israel/Levitzki), and (c) multiple perspectives on these transfers (i.e., marital couples/Lee, parent and offspring/Kim).

GRANDPARENT INVOLVEMENT AND PARENTING STRESS AMONG UNMARRIED MOTHERS WITH YOUNG CHILDREN

E.A. Greenfield, *Rutgers, The State University of NJ, New Brunswick, New Jersey*

Drawing on an intergenerational solidarity model, this study examined the extent to which greater grandparent involvement in terms of three related-yet-distinct dimensions (frequency of contact between grandparents and grandchildren; intergenerational co-residence among grandparents, adult children, and grandchildren; and grandparents' provision of childcare for grandchildren) is associated with less parenting stress among unmarried mothers of children ages five and under. Multivariate regression models were estimated using data from the Fragile Families and Child Well-Being Study. Results indicated that frequency of contact was associated with less parenting stress, but only among African American mothers. Co-residence was associated with less parenting stress, but only among White and Latina mothers. Findings suggest the importance of examining multiple aspects of grandparent involvement, as well as potential differences by race/ethnicity, when examining the implications of grandparent involvement for individual and family well-being.

AGREEMENT BETWEEN AGING PARENT'S BEQUEST INTENTION AND MIDDLE-AGED CHILD'S INHERITANCE EXPECTATION

K. Kim, D.J. Eggebeen, S.H. Zarit, *Department of Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania*

Inheritance is the final transfer between generations, but aging parents usually have made plans for bequests well in advance, and their adult children form their own expectations of receiving an inheritance. Prior studies have examined separately the correlates of parents' bequest intentions and children's inheritance expectations. This study investigated the agreement between parent's intention of leaving a bequest and child's expectation of receiving an inheritance. Among 327 dyads of aging parents and their middle-aged children, 54% showed agreement about inheritance. Another 44% were discordant; parents said they intended to leave a bequest, but their child did not expect any inheritance. Factors associated with agreement or discordance over the likelihood of receiving an inheritance were income, co-residence, family size and past patterns of support. These results suggest that inheritance/bequest expectations should be understood as a continuation of support exchanged between generations, but which may also be circumscribed by parent's financial resources.

TO GIVE OR NOT TO GIVE, THIS IS THE QUESTION; ISRAELI OLDER PARENTS NEGOTIATE THE PROVISION OF SUPPORT TO ADULT CHILDREN

N. Levitzki, *Andrus Gerontology Center, University of Southern California, Los Angeles, Israel*

The purpose of this study was to explore the meanings and experiences of healthy older parents with regard to providing inter-vivo resources to their adult children. The narrative-qualitative mode of inquiry was chosen to examine the experiences and meanings of the older parent's role, as they emerge from the subjective stories of parents. Narrative analysis of face-to-face in-depth narrative interviews with 23 healthy Israeli older parents, aged 56 to 69, was conducted. Parents' inter-vivo financial, instrumental, and emotional transfers to their adult children were constructed through negotiating tensions that take place within a dialectical framework of conflicting forces. By questioning how they should reshape their support in order to adjust it to their children's adult status, aging parents negotiated conflicting attitudes and motives as well as their experiences of intergenerational relationships. This study uncovers the underlying meanings and experiences involved in a well-known dimension of the family in later years.

IS IT STRESSFUL OR REWARDING TO HELP GROWN OFFSPRING? THE COUPLE'S PERSPECTIVES

J. Lee, S.H. Zarit, M. Rovine, *Human Development and Family Studies, Penn State University, State College, Pennsylvania*

Married couples give and receive support from their offspring. Using data from the Family Exchange Study, we examined the support exchanges between married couples and their offspring, as well as the couple's perceived stress and reward in their relationships with offspring. A total of 384 couples (ages 49 to 69) reported independently from one another on their relationship with 511 adult children. Regression analysis revealed that the unbalance in exchange between couple and adult children was negatively associated with couple's perceptions of stress and rewards. In addition, we examined whether relationship quality affected the couple's perceptions concerning help exchanges with offspring. Mediation analysis revealed that the association between a couple's perception of reward and stress and unbalance in help exchanges was mediated by couple's ambivalence toward children. These results underscore how a couple's relationship with their offspring contributes to the link between intergenerational exchange and parental well-being.

SESSION 1467 (SYMPOSIUM)

LONGITUDINAL DATASETS TO INFORM TRANSPORTATION AND MOBILITY AS A CREATIVE APPROACH IN HEALTHY AGING

Chair: *S. Classen, University of Florida, Gainesville, Florida*

Discussant: *D. O'Neill, Centre for Mobility Enhancement, Dublin, Ireland*

There is considerable interest among members of the Transportation and Aging Formal Interest Group, Gerontological Society of America, and many others, in longitudinal datasets pertaining to aging and transportation issues. This interest is due to the potential for longitudinal data to: inform on the safe and independent transportation and mobility choices of the older drivers; shape the transportation planning policies; inform researchers on trends, patterns and demographic influences of transportation use; and provide information to agencies charged with meeting the transportation and mobility needs of an aging society. We are pleased to offer this timely and important symposium on longitudinal datasets. Recognized experts in the field of aging and transportation, with published work on analyzing secondary databases, will present in this symposium. Objectives for the symposium are to: (a) impart knowledge on the availability of and access to existing longitudinal datasets that collect data on transportation variables for older adults; (b) understand the pearls and the perils of working with exist-

ing and longitudinal data; (c) be cognizant of the results and implications of such data for transportation policy, research, and service; and (d) conceptualize the core messages from experts who have analyzed data from longitudinal datasets. The symposium will conclude with a discussant's summary on the critical concepts explained in the individual presentations.

CROSS-SECTIONAL AND LONGITUDINAL EVALUATION OF AGE-BASED TESTING ON DRIVING IN OLDER AUSTRALIANS

L.A. Ross, K. Anstey, *Centre for Mental Health Research, Australian National University, Canberra, Australian Capital Territory, Australia*

OBJECTIVES: To investigate the impact of age-based testing (ABT) for licensing renewal on driving status using the DYNOPTA study (n=5206). Logistic regression revealed that after accounting for demographic and health characteristics, participants not eligible for ABT (based on age and state of residence) were 2.65 (95% CI: 2.04-3.45, $p < .0001$) times more likely to drive than those participants who were eligible to receive ABT. Additional longitudinal models examined the robustness of ABT on later driving status trajectories and the impact of ABT on driving in persons with visual and cognitive impairments. **CONCLUSION:** The effectiveness of current visual and medical ABT on vehicular crashes is debated. However, growing evidence suggests that ABT impacts driving mobility, a key component of independence for older adults. Further investigation of ABT policies on crash rates and driving mobility/safety, and the use of other scientifically designed ABT strategies is needed.

THE FATALITY ANALYSIS REPORTING SYSTEM: CRASH DATA SINCE 1975

M. Bedard^{1,2,3}, S. Dubois³, *1. Public Health Program, Lakehead University, Thunder Bay, Ontario, Canada, 2. Northern Ontario School of Medicine, Thunder Bay, Ontario, Canada, 3. St. Joseph's Care Group, Thunder Bay, Ontario, Canada*

The Fatality Analysis Reporting System (FARS) contains data on all crashes resulting in at least one fatality in the United States since 1975. Collected in a standardized format by the National Highway Traffic Safety Administration, FARS is accessible for free. While not a true longitudinal database (it does not track the same individuals over time) it allows the examination of transportation-related trends of interest to researchers and policy-makers. We have used FARS to: document fatality trends and project an increase among adults (65+) but a decrease among younger adults (aged less than 30); illustrate older adults' susceptibility to crash trauma compared to younger adults; demonstrate passengers are beneficial to older drivers; examine the risk associated with medications. While FARS is limited to crashes resulting in fatalities it remains one of few ethical approaches to examine certain issues (e.g., seatbelts) and contains data that provide evidence and help formulate research questions.

DRIVING PREVALENCE AND CESSATION IN THE 65-PLUS: RESOURCES IN THE HEALTH AND RETIREMENT STUDY

J. Smith, *1. University of Michigan, Ann Arbor, Michigan, 2. Institute for Social Research, Ann Arbor, Michigan*

The NIA-funded Health and Retirement Study (HRS) is a longitudinal panel study of the population over age 50. Since 1992, more than 27,000 people have participated. This major resource, which is located in the Institute for Social Research at the University of Michigan, is available for public use. Data and documentation can be downloaded from the HRS website. In biennial waves, participants aged 65 and older are asked whether or not they drive. Those who do drive provide information about the typical distance of their trips. HRS also includes information about age, gender, race, geographic region (rural versus urban), education, household composition, change in marital status, work status, volunteer status, illnesses, IADL-ADLs, functional limitations,

medications, personality, lifestyle, beliefs, change in living arrangements, household income, consumption, and financial assets. Cross-sectional and longitudinal HRS data can be used to examine multiple questions about the correlates and consequences of driving restriction and cessation.

PEARLS AND PERILS OF LONGITUDINAL DATASETS: PERSPECTIVES FROM AN EPIDEMIOLOGIST

A. Dellinger, *Injury Center, CDC, Atlanta, Georgia*

A common situation that we find ourselves in when conducting research on transportation and mobility among older adults is the "what we want versus what is available" problem. Most existing data are from cross-sectional studies. This is particularly problematic in areas where a broader view of health and safety is most appropriate. For example, "what we want" are data from different types of sources simultaneously (e.g., motor vehicle records, miles driven, health status, functional status and other information). Usually "what is available" are data in one of these domains that cannot be linked to data in others. Moreover, using cross-sectional data, it is not possible to follow participants over time to illuminate causal relationships, we report results that are "statistical associations." Longitudinal data reveal causal relationships. Once causal relationships are revealed, developing prevention programs is facilitated, and health, safety and mobility can be maximized.

SESSION 1470 (SYMPOSIUM)

NEW RESEARCH DIRECTIONS IN THE STUDY OF DISABILITY AND THE AGING LIFE COURSE: THE NATIONAL LONG TERM CARE SURVEY AND BEYOND

Chair: J. McNally, *NACDA, University of Michigan, Ann Arbor, Michigan*

This symposium will present the final research papers emerging from the "The 2004 Wave of National Long Term Care Survey: New Research Directions" meeting held at the National Institutes on Aging (NIA) in May of 2009. The May meeting represented a forum for new and established researchers to discuss research designs and offer preliminary findings that used the 2004 Wave of the National Long Term Care Survey in combination with other studies. The NLTCs, led by Dr. Kenneth Manton of Duke University, will present the final research papers emerging from the "The 2004 Wave of National Long Term Care Survey: New Research Directions" meeting held at the National Institutes on Aging (NIA) in May 2009. The meeting presented a forum for new and established researchers to discuss research designs and preliminary findings that used the 2004 Wave of the National Long Term Care Survey in combination with other studies. The NLTCs, led by Dr. Kenneth Manton of Duke University, is a nationally-representative sample both of the community and of institutional populations that has been collected approximately every five years, and consists of six waves (1982, 1984, 1989, 1994, 1999, and 2004) and has generated a body of research significantly contributing to our understanding of disability and the aging life course. After preliminary review and presentations in May the authors are finalizing the papers emerging from this NIA sponsored meetings and the proposed symposium will allow the work to be presented to interested members of the research community within a structured format. The proposed symposium will look at both the pace and pattern of disability across time as well as methodological issues associated with the use of longitudinal data to study the disability process and the provision of care. Finally, the proposed symposium will allow researchers to learn of potential bridges between the existing NLTCs studies and the recently funded "National Study of Disability Trends and Dynamics" which continues the study of disability and the aging lifecourse begun by the NLTCs.

IDENTIFYING INDIVIDUALS IN NEED OF FULL-TIME CAREGIVING

L. Sands, H. Xu, *Purdue University, West Lafayette, Indiana*

Many persons who are disabled in basic activities of daily living (ADL) such as dressing, bathing, eating, transferring and toileting are dependent upon others to carry out these activities needed for health and survival. Evidence is needed to help caregivers, clinicians, and policy makers plan the amount of care that will be needed by ADL disabled older adults. The purpose of this study is to classify patients according to their probability of needing full-time care based on four common clinical indicators: number of ADL dependencies, level of cognitive impairment, presence of depressive symptoms, and history of stroke. Using the NLTCS the results show that patients can be classified according to their probability of whether or not they need full-time care. Such a classification would facilitate counseling informal caregivers about the caregiving needs of their care receiver and would facilitate planning long-term care resources needed by ADL disabled older adults.

BALANCING ELDERCARE AND WORK: THE EFFECTS OF A FAMILY-FRIENDLY WORKPLACE ON WORK

J. Kim, B. Ingersoll-Dayton, M. Kwak, *NACDA, University of Michigan, Ann Arbor, Michigan*

The purpose of this study is to examine the mediating effects of family-friendly work environments on the relationship between employed caregivers' stress and work performance. The sample consists of primary caregivers who are currently participating in paid jobs ($n=652$) from the 2004 National Long-Term Care Survey. Using structural equation modeling (SEM), we investigate relationships among four latent variables: caregivers' stress, supportive employers, utilization of work accommodations, and work productivity. The results show that caregivers' stress has the largest total effect (2.18) on their low work performance most of which (80.8%) is due to a relatively large indirect effect (1.76). The indirect effect is accounted for by the utilization of work accommodations which are negatively ($\beta = -.025$) affected by employers' informal supports. The findings suggest that a family-friendly supervisor mitigates the effects of caregivers' stress on their work performance, helps them balance work and elder care, and enhances their work performance.

THE EFFECTS OF FORMAL SERVICE UTILIZATION ON INFORMAL CAREGIVERS' PHYSICAL AND PSYCHOLOGICAL HEALTH

J. Kim, *University at Albany, Albany, New York*

This study examines how the 1997 Balanced Budget Act and the 2000 National Family Caregiver Support Program affect formal service utilization by the frail elderly and the caregivers; and how these two formal service utilizations influence the caregivers' health outcomes. Although relationships between formal and informal care have long been debated in health economics or public policy, and they clearly exist as substitution or complementary, this relationship was not studied in caregiving stress research. Using data drawn from the 2004 National Long Term Care Survey, this study examines paths of relationships among stressors, appraisals, formal service utilizations and the caregivers' health outcomes in a structural equation modeling using LISREL 8.8. Conceptually, this study applies a theoretical framework that incorporates relations between formal and informal care. Results from this research will inform researchers to expand a theoretical framework by exploring the roles of formal service utilization in the caregiving process.

PREDICTORS OF CAREGIVER STRAIN AMONG CAREGIVERS OF FRAIL ELDER

S. Kang, *The University of Texas at Arlington, Arlington, Texas*

Family members play a main role in providing caregiving to America's frail elders. Many studies demonstrate that stress caused by care-

giving can have adverse effects on family caregivers' psychological, social, and physical well-being (Gatz, Bengtson, & Blum, 1990; Light, Niederehe, & Lebowitz, 1994; McKinlay, Crawford, & Tennstedt, 1995; Toseland, Rossiter, Peak, & Smith, 1990; Zarit, 1987). This makes the development of interventions aimed at reducing caregiver stress an important social issue and understanding the caregiving experience in national samples is crucial to development of effective programs and interventions. Utilizing the role theory framework (Goode, 1960) and the stress process framework (Pearlin, Mullan, Semple, & Skaff, 1990), the paper examines variances in caregiver strain (emotional, physical, and financial) and identifies the predictors of caregiver strain. The results of this study provide crucial information for professionals to develop effective caregiver support and intervention programs that target specific causes of caregiver strain.

DOES DISABILITY PROGRESSION AFFECT ASSISTIVE DEVICE USE?

K. Pallone, K.F. Ferraro, *Purdue University, West Lafayette, Indiana*

This study seeks to identify predictors of assistive device use based on panel data from the 1994, 1999, and 2004 waves of the National Long Term Care Survey (NLTCS). Respondents identified what assistive devices they used for transferring, getting around indoors, toileting, and bathing. Variables to predict assistive device use in 2004 included demographic variables, body mass index (BMI), previous history of assistive device use count, and disability progression in the form of an increase in lower body impairment between 1994 and 1999. Results reveal that age, obesity, assistive device use in earlier waves, and disability progression between 1994 and 1999 are consistent significant predictors of the number of assistive devices used in 2004. Increases in lower body impairment had a greater effect on number of assistive devices used among the middle-old, compared to the young-old and oldest-old.

SESSION 1475 (SYMPOSIUM)

PROVIDING RISK AND DIAGNOSTIC INFORMATION ABOUT DEMENTIA: RESEARCH ON IMPACT AND IMPLICATIONS

Chair: B. Carpenter, *Psychology, Washington University, St. Louis, Missouri*

Because of demographic and epidemiologic trends, in the coming decades more people will receive risk and diagnostic information about dementia. Given these trends, more needs to be known about the process and outcome of sharing risk and diagnostic information. The objective of this symposium is to present results from recent research on how dementia risk and diagnostic information is shared with patients and family members and the effect of that disclosure. The symposium begins with results from research on the impact of disclosing genetic risk information to adult children whose parents have dementia. A second presentation examines videotaped interactions during which a clinician delivers an actual dementia diagnosis, using discourse analysis to examine features of the diagnostic conversation. A subsequent presentation describes the use of a standardized observational analysis system to examine clinician's patient-centered language during these diagnostic conversations. Once a diagnosis of dementia has been established, different challenges then arise. An additional presentation explores discrepancies between patients and family members about potential causes of mild cognitive impairment symptoms. And finally, qualitative interviews with patients and family members highlight wide variability in the extent to which families process and discuss a dementia diagnosis once they leave the clinic office. As a set, results from these studies provide information that can guide future research questions as well as clinical recommendations for healthcare providers, people with dementia, and their companions about how to approach dementia risk and diagnosis conversations to maximize psychological and functional outcomes.

PHYSICIAN USE OF PATIENT-CENTERED TECHNIQUES DURING DISCLOSURE OF A DEMENTIA DIAGNOSIS

A.K. Zaleta, B. Carpenter, *Psychology, Washington University, Saint Louis, Missouri*

Clinician use of patient-centered techniques when delivering a dementia diagnosis may influence a variety of outcomes. We analyzed 54 videotapes in which a physician delivered a dementia diagnosis to patients and their companion using an adaptation of the Roter Interaction Analysis System. Clinicians used a wide range of facilitative and rapport building techniques. The mean level of positive rapport building techniques was high relative to emotional rapport building techniques. Among facilitative techniques, the most common were back channeling, checking physician understanding, and checking patient/companion understanding. There was more variability in the use of patient-centered techniques across clinicians compared to within clinicians. Patient-centered techniques were not associated with post-diagnosis patient/companion depression, anxiety, or satisfaction. Clinicians used similar patient-centered techniques regardless of patient dementia severity. Clinician use of facilitative techniques predicted patient participation. Our results suggest that clinician use of patient-centered techniques may affect the process of diagnostic disclosure.

ANALYSIS OF KEY LINGUISTIC FEATURES IN A TRIADIC DEMENTIA DIAGNOSIS CONVERSATION

E. Sakai, *Psychology, Washington University, St Louis, Missouri*

Collaborative communication is critical to successful dementia care. This study examined linguistic characteristics of conversations among physicians delivering a dementia diagnosis to patients and companions. Fifty-six triadic conversations were coded using the Linguistic Inquiry and Word Count software. Physicians spent the most time talking during the interactions (mean proportion = 83%) compared to patients (8%) and companions (8%). Patients and companions underestimated the time the physician spent talking and overestimated the time they themselves spent talking, with patients more extreme in their misestimations. Physicians talked a comparable amount of time regardless of patients' dementia severity, but patients talked less and companions more when dementia was more severe. There was wide variability in the frequency with which physicians used the terms "dementia" and "Alzheimer's." Diagnostic language was not associated with psychological distress among patients and companions. Dementia diagnostic conversations appear to reflect an evolving multiparty adaptation to cognitive impairment.

GENETIC SUSCEPTIBILITY TESTING FOR INDIVIDUALS AT RISK FOR ALZHEIMER'S DISEASE: FINDINGS FROM THE REVEAL STUDY

S. Roberts, *University of Michigan, Ann Arbor, Michigan*

Advances in research on Alzheimer's disease (AD) have made possible genetic susceptibility testing for asymptomatic individuals. Although such risk assessment is not recommended for use in clinical practice, it has recently become available via direct-to-consumer genetic testing companies, raising a need for empirical data to inform policy and practice decisions. The Risk Evaluation and Education for Alzheimer's Disease (REVEAL) Study is a multi-center, NIH-funded series of three successive clinical trials examining the impact of using APOE genotyping to help inform interested individuals about their chances of developing AD. This session will review findings from the project across domains including 1) psychological impact of testing, 2) health and insurance behavior changes prompted by testing, 3) effects on risk perceptions, and 4) differential impact across various methods of genetic education and counseling (e.g., extended vs. condensed vs. telephone protocols). The implications of study findings for practice and policy will be discussed.

DO PATIENTS AND THEIR FAMILY MEMBERS AGREE ABOUT WHAT MIGHT BE CAUSING MCI?

J. Lingler, L.A. Garlock, L. Garand, A. Ercius, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Background: Mild cognitive impairment (MCI) is a known risk state for dementia. We examined illness representations among persons recently diagnosed with MCI and their family members. Methods: Forty-three patient and family member dyads were recruited from a university-based memory disorder clinic. As part of the Illness Perception Questionnaire, each ranked the importance of 25 factors as potential causes of the patient's MCI symptoms. Results: Patient and family member dyads exhibited only fair levels of concordance in their rankings of the primary cause of MCI symptoms ($\kappa = .37$). For both patients and family members, heredity was the most frequently cited cause. Nearly half of the relatives but only one third of the patients attributed symptoms to potentially controllable factors (e.g., diet, mental attitude). Conclusions: Within dyad disagreement about the likely causes of MCI symptoms is not uncommon. Interventions to minimize misconceptions about MCI should target both patients and family members.

UNMENTIONED AND UNMENTIONABLE: HOW FAMILIES MAKE SENSE OF A DIAGNOSIS OF DEMENTIA

C. Bamford, K. Brittain, J. Bond, M. Eccles, L. Robinson, *Institute of Health & Society, Newcastle University, Newcastle upon Tyne, United Kingdom*

Existing studies have focused on the role of professionals in disclosing a diagnosis of dementia. Research suggests that many carers find it difficult to discuss the illness with the person with dementia. Using secondary analysis of interviews with 17 people with dementia and 22 family carers, this paper explores how families make sense of a diagnosis of dementia. The data indicate wide variability, with dementia being accepted as a 'normal' topic of conversation in some families, but being unmentioned and unmentionable in others. Three key themes emerged from the data: the exclusion of the person with dementia from key conversations; the projection of thoughts and feelings onto the person with dementia; and the avoidance of opportunities to explore the diagnosis. The findings highlight the limited opportunities for many people with dementia to share their thoughts and fears. Interventions are needed to support people with dementia and families after disclosure.

SESSION 1480 (POSTER)

SPIRITUALITY AND RELIGIOUSITY

RELIGIOUS CREATIVITY AND THE VITALITY OF COLLECTIVE MEMORY

J. Spannari, *University of Helsinki, Helsinki, Finland*

Creativity of older adults is often viewed as influencing or empowering the individuals in question. The creative activities could have an effect also on the surrounding community. Collective memory is something communities need for identity building and giving meaning to the past, present and future events. Collective memory is constructed through social processes and is often linked with the shared religious or other meaning system of the group. Some studies suggest that sustaining and mediating the collective memory would be one of the designated tasks of old age. This paper aims to show that by their creative approach to religious texts the older writers support, renew and sustain the collective memory of the community. The examination is based on a qualitative analysis of short religious poems, prayers and aphorisms (N=943) written by Finnish elderly persons in the study groups of Pension Union, the biggest pensioners' organization in Finland, in year 1999. In the texts the writers communicated their personal views and experiences by using religious language deeply rooted to their Finnish and Lutheran cultural heritage. In their texts the older writers combined, quoted and interpreted different kinds of religious texts and construc-

tions. The texts were used in most ingenious ways to create new landscapes where not only the history but also the interpretations of current events are visible. The collective memory is adapted and renewed in a two-way negotiative process. This study shows that through religious creative group activities this process could be facilitated and inspired.

RELIGIOSITY, SPIRITUALITY AND PERCEPTION OF FAMILY AND FRIEND SUPPORT

V. Hamm Baugh, *Psychology, Kean University, Union, New Jersey*

The purpose of the present study was to examine the relationship between religious and spiritual beliefs and practices and their relationship to perceptions of social support among older adults (65 years and older). Results suggest that private religious practices, such as praying and viewing or reading religious materials, are positively correlated with the amount of support older adults believe they would receive from family if faced with a problem or difficult situation. However, a larger number of variables were positively correlated with the amount of support anticipated from friends including; daily spiritual experiences, considering oneself to be a religious or spiritual person, believing religion to be a source of strength and comfort, believing one's whole approach to life is based on religion, and feeling God's love through others. Friend support may be a more tangible and readily available source of support than family for older adults and therefore religious belief systems and practices may be experienced more through the friendship relationship. Additionally, friends may serve an important role in supporting the religious activities of older adults. These results support the inquiry into the role of key relationships in the quality of life of older adults.

PREDICTIVE FACTORS OF GENERATIVITY IN MIDLIFE: EXAMINING THREE ELEMENTS OF RELIGIOSITY

L. Schlosnagle, J. Henrie, *West Virginia University, Morgantown, West Virginia*

Using MIDUS 2 data (N = 2363, 58.9% female, mean age = 57.01, SD = 12.52), the current study investigated whether three sub-domains of religiosity (religious identification, religious support, and private religious practice) (George, Ellison, & Larson, 2002) were predictors of generativity. A hierarchical regression was conducted. Initially, religious identification ($\beta = .13, p < .001$) was a significant predictor ($R^2 = .017$; $F(1, 2361) = 40.54, MSE = 13.57, p < .001$). In the second model, religious identification ($\beta = .10, p < .001$) and religious support ($\beta = .08, p < .001$) were significant predictors ($R^2 = .022$; $F(2, 2360) = 26.98, MSE = 13.50, p < .001$; $F\Delta(1, 2360) = 13.21, p < .001$; $R^2\Delta = .005$). In the final model, religious identification ($\beta = .04, p = .084$) was not a significant predictor, but religious support ($\beta = .07, p = .002$) and private religious practices ($\beta = .11, p < .001$) were ($R^2 = .031$; $F(3, 2359) = 25.32, MSE = 13.39, p < .001$; $F\Delta(1, 2359) = 21.52, p < .001$; $R^2\Delta = .009$). The findings were unexpected, as others have found a relation between generativity and religious identification (e.g., Mattis et al., 2004; Musick et al., 2000; Ruiter & De Graaf, 2006). This may be due to the Loyola Generativity Scale's emphasis upon perceived generativity rather than frequency of generative behaviors (McAdams & de St. Aubin, 1992).

UNDERSTANDING THE IMPACT OF FAITH COMMUNITIES ON SOCIAL CAPITAL: A QUALITATIVE ANALYSIS

M. Chandlee, H. Pope, R.E. McKeown, *Epidemiology and Biostatistics, University of South Carolina, Columbia, South Carolina*

A study funded by Duke University called Understanding Social and Personal Aspects of Faith and Practice Related to Health, is currently being conducted to explore the complex relationships among social capital, religious faith and practice, and health using qualitative research methods (in-depth interviews). In 2008, two of the researchers (MC and HP) interviewed a total of 48 persons across the state of South Carolina. Eligible participants were African American (AA) and Caucasian adults over the age of 50 classified as regular attendees of religious services

or infrequent or non-attendees of religious services. The interviewers asked questions related to the participants' group participation, their level of trust in social networks, and their outreach to the community. A qualitative analysis was performed using QSR- Nvivo software to identify themes in participant responses. There were major differences in responses between regular attendees of religious services and infrequent or non-attendees of religious services in the areas of social support, trust levels, impact of community outreach efforts, and dissemination of health information. These results support that religious institutions can be a source of social capital by providing a variety of needs and positively impacting the health and well-being of older adults. Based on these findings and existing literature, researchers will develop a survey instrument to assess the mechanisms of social capital, health outcomes, and multiple dimensions of faith and practice for use in future research.

THREE FACTOR MODEL OF RELIGIOUS ORIENTATIONS: MEANS, ENDS, QUEST

E. Farrington, K. Gapinski, E.H. Thompson, A. Futterman, *Psychology, College of the Holy Cross, Worcester, Massachusetts*

Using measures of religious orientation derived from Allport and Ross (1967) and Batson (1991), we describe a three-factor model of religious motivation in a random sample of 345 older adults living in Worcester, MA., and examine the convergent/discriminant validity of the three religious motivation factors. Three religious factors in keeping with the religious orientations "religion as an end in itself" (Ends), "religion as a means to other ends" (Means), and "the search for purpose and meaning of life in a religious context" (Quest) emerged from exploratory factor analyses, and were confirmed in randomly selected halves of the sample. Means and Quest were associated ($r > .25$), as were Ends and Means ($r > .20$), but Quest and Means largely independent of one another ($r = .05$). Ends and Means religious orientations were differentially related to religious involvement, belief, experience, and knowledge; Quest religiousness was largely unrelated to religious measures with the exception of positive correlations with self reported religious experience. By contrast, Quest was predicted by background characteristics (e.g., married, higher levels of Quest), personality characteristics (e.g., Neuroticism, Extroversion, Openness on the NEO), by functional impairments (e.g., ADLs), and by other non-religious measures.

A COMPARISON OF RELIGIOUS AND NON-RELIGIOUS OLDER ADULTS ON WELL-BEING AND CONTRIBUTING VARIABLES

S.M. Horning, R.E. Cornwell, *Psychology, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

Religiosity has been reported as being advantageous to mental health and well-being (Parker et al., 2004; Shkolnik et al., 2001). Previous studies, however, fail to include non-religious individuals, comparing those high and low on religiosity. The present study aimed to compare religious and non-religious older adults on well-being, social support, and meaning in life. Participants (N = 134), including atheists, agnostics, low on religiosity, and high on religiosity, completed an online questionnaire assessing well-being, presence and search for meaning in life, and satisfaction with and number of social supports. To analyze differences between groups, five one-way ANOVAs were conducted. No significant difference between groups was found on levels of well-being or satisfaction with social support. A significant difference between groups was found on the presence of meaning in life ($F[3, 86.78] = 6.97, p < .01$) with the high religiosity group having higher levels of perceived meaning than the non-religious groups ($p < .01$). A significant difference was found for the search for meaning in life ($F[3, 123] = 3.42, p < .05$), with the high religiosity group endorsing greater search for meaning than the atheists. Also, a significant difference between groups was found on total number of social supports ($F[3, 61.10] = 5.28, p < .01$), with

the religious groups having greater numbers of supports than the agnostics. The findings suggest that being religious does not inherently increase well-being; however, religiousness appears to encourage older adults to search and obtain meaning in life. Additionally, although religiosity may promote larger social networks, religious and non-religious seniors share comparable levels of satisfaction with their support.

DIFFERENCES BETWEEN RELIGIOUS AND NON-RELIGIOUS OLDER ADULTS ON COPING BEHAVIORS

S.M. Horning, R.E. Cornwell, *Psychology, University of Colorado at Colorado Springs, Colorado Springs, Colorado*

Using religion to cope is highly prevalent among older adults (Koenig et al., 1992), especially those hospitalized or suffering from a medical illness (Burker et al., 2004). However, little is known regarding the coping styles of non-religious older adults. The present study explored coping behaviors among a sample of 134 religious and non-religious older adults. Self-identified atheistic, agnostic, low religiosity, and high religiosity participants completed an online questionnaire assessing coping behaviors. Participants rated their utilization of 14 common coping behaviors, including self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame. Fourteen one-way ANOVAs were conducted to explore group differences. A significant difference between groups was found for substance use, $F(3, 102.21)=7.68, p<.01$. Atheists were more likely to endorse using substances to cope compared to the low and high religiosity participants ($p<.01$). A significant difference resulted for the use of religious-oriented coping, $F(3, 52.51)=83.99, p<.01$. The high religiosity group endorsed greater rates of religious coping compared to all other groups ($p<.01$). Additionally, a significant group difference was found for the use of humor to cope ($F(3, 118)=3.06, p<.05$), with the atheists endorsing greater use of humor to cope compared to the low religiosity group ($p<.01$). No other group differences on coping behaviors were found. The results of the study suggest that working with religious and non-religious older adults in clinical settings should focus on how the person's beliefs interact with their interpretation of the event and subsequent coping style.

HOW CONTROL IMPACTS THE RELATIONSHIP BETWEEN RELIGIOSITY AND SUBJECTIVE WELL-BEING

B. Jackson, C. Bergeman, *Psychology, University of Notre Dame, Notre Dame, Indiana*

Research addressing how and why some individuals age better than others and identifying characteristics that promote optimal outcomes in later life is increasingly important as greater numbers of adults live well into their eighties and beyond. The present study looks at the positive relationship between religiosity and subjective well-being (SWB) in middle-aged and older adults, hypothesizing that this relationship is indirect and mediated by perceived control. The 539 participants were from the Notre Dame Study of Health and Well-Being (aged 31-88, mean age 58.5; 56% female; 87% Caucasian). Data were collected via self-report questionnaires and composite scores for religiosity, perceived control, and SWB were created. Results of regression analyses revealed that perceived control moderates the impact of religiosity on SWB; perceived control was also found to partially mediate the effect of religiosity on SWB, lending initial support to the hypothesized mediational role of perceived control. These findings suggest that individuals higher in perceived control experience greater benefits from religious and spiritual beliefs and practices; they also indicate that a portion of religiosity's effect on SWB may be indirect, operating via enhanced perceptions of control. This study presents one mechanism by which the beneficial effects of religiosity on SWB are conveyed.

GRANDPARENTS' INFLUENCES ON COLLEGE STUDENTS' RELIGIOUSNESS: DOES DEMENTIA MATTER?

S.H. McFadden, R. Subramony, B. Mullins, K. Maguire, *Psychology, University of Wisconsin Oshkosh, Oshkosh, Wisconsin*

College students whose grandparents do not have dementia ($n = 91$) and students with at least one grandparent with dementia ($n = 86$) completed surveys that included measures of students' religiousness, closeness to grandparents, grandparents' religiousness, and attitudes about older people. Participants also wrote answers to 3 questions about grandparents' influence on religiousness/spirituality, religious questions resulting from relationships with grandparents, and beliefs about how grandparents influence young adults. No significant differences were found in religiousness, nor in emotional closeness with the grandparents. Grandparents with dementia were described as showing a significant drop in their own religiousness ($p = .02$) since the onset of memory loss. Their grandchildren reported that witnessing changes in these grandparents increased their prayer frequency, stimulated theodicy questions, and produced increased acceptance of older persons. This was confirmed by comparison of the two groups on a measure of patience with older adults, with the students whose grandparents have dementia reporting greater patience ($p = .005$). The majority of students whose grandparents do not have dementia answered the narrative questions by stating that there had been no specific grandparent influence on their religiousness, but rather a more general influence as role models. Students in both groups pointed to closeness as the key factor in grandparent influence. These findings suggest that young adults' observations of changes in grandparents due to progressive forgetfulness can motivate religious behaviors like prayer and religious questioning.

THE ROLE OF FAITH IN STROKE RECOVERY

S. Ostwald, L.K. Derkits, K. Janssen, *University of Texas at Houston, Houston, Texas*

Faith has been suggested as an important coping strategy for some persons who live with chronic illness. This mixed method research collected data from 10 couples (average age of 70.6), approximately 5.3 years after a stroke. The couples were interviewed about the impact of their belief system on their recovery; and completed the R-COPES and F-COPES questionnaires. The interviews were transcribed; questionnaires were entered into SPSS for analysis. Code words and phrases were identified from the transcripts and combined into themes. Two major themes were identified – personal relationship with God (spirituality) and connection to the church community (religiosity). Most stroke survivors and their spouses reported a positive relationship with God, although some described earlier feelings of anger and questioning. A few continued to question the role of God in their lives. Couples described both strong connections and disconnections with their church communities. While churches helped some couples cope with the stroke by giving emotional and physical support, other couples felt abandoned by the church. Individual scores on the subscales of the R-COPES and Acquiring Spiritual Support (ASS) on the F-COPES were consistent with the interview data. Stroke survivors reported lower ASS subscale scores and higher negative coping than their caregivers. Stroke survivors with greater disabilities experienced more obstacles and insensitivity to their needs by the church community. Some experienced the sense of “the church dropping all around” them. Healthcare professionals should recognize the personal role of faith in long term recovery and provide opportunities for couples to explore their feelings.

RELIGIOUSNESS/SPIRITUALITY, AND SOCIAL SUPPORT ON DEPRESSION AMONG KOREAN IMMIGRANT OLDER ADULTS

S. Roh, *New York University, New York, New York*

Aim of study: The objective of this study is to understand the multidimensional aspects of religiousness/spirituality, and social support

on depression among Korean immigrant older adults with a primary focus on examining how much the effects of religiousness/spirituality and social support can account for depression. Method: The study utilized cross-sectional survey design. 196 participants who were age 65 years or older were recruited from Korean senior centers in the New York City metropolitan area. The Brief Multidimensional Measures of Religiousness/Spirituality (BMMRS) was used to measure various domains of religiousness/spirituality, including daily spiritual experiences, values/beliefs, forgiveness, private religious practice, religious/spiritual coping, and religious support. In an attempt to measure a broad range of social support, Lubben Social Network Scale-Revised (LSNS-R) was used. Depression was assessed using Geriatric Depression Scale-30 Korean version (GDS-K). Results: Multivariate analyses found religious and spiritual coping was associated with decreased depression after controlling for socio-demographic variables. In addition, social support was negatively related to depression. Conclusion: This study's findings have the potential to enhance our understanding of the multidimensional aspects of religiousness/spirituality and social support among older adult immigrants including Koreans. The findings can be used to foster greater collaboration between the healthcare system and faith communities in order to improve quality of life of older adults. This study was supported by John A Hartford Foundation.

ALTERNATIVE THEMATIC ANALYSIS AND REPRESENTATION: A GRANDMOTHER AND GRANDDAUGHTER READ-TOGETHER

D.M. Seponski, D.C. Lewis, *University of Georgia, Athens, Georgia*

When examining the transmission of values between grandmothers and granddaughters, research has generally been restricted to a unidirectional approach. However, Seponski and Lewis (2009) demonstrated that the effects are bi-directional, with mutual influence and co-learning between the generations. The current study further examines the bi-directional transmission of values by identifying the most salient value transmitted. Semi-structured interviews were conducted with four grandmother-adult granddaughter dyads ($n = 8$). The analysis followed the constant comparative method as described by Strauss and Corbin (1990). The emerging data suggests that the most salient values are religion and spirituality. Furthermore, the transmission of religion and spirituality between grandmothers and granddaughters is a bi-directional process whereby the grandmother teaches the granddaughter through religious studies at a young age and through behavioral modeling as an adult; the granddaughter demonstrates her adherence to the values through action and religious participation, and thus affirms the grandmother's values. Emerging themes will be described in detail. Uniquely, an additional intention of the presentation is to provide an alternative representation of findings on the relationship between grandmothers and their granddaughters. This alternative representation is a book targeted toward the participants and other grandmothers and granddaughters that is reader-friendly, has no professional jargon, and is illustrated. It is important to produce alternative representations of research findings to allow for creativity, expressiveness, and give voice to the participants. Thus, the results will be presented in the standard scientific format as well as a format that is readable and usable to the participants.

PSYCHOSOCIAL INDICATORS OF FORGIVENESS AMONG OLDER MALE OFFENDERS

A. Bishop, *Human Development and Family Science, Oklahoma State University, Stillwater, Oklahoma*

The purpose of this study was to identify key psychosocial predictors of forgiveness among aging male offenders. Participants included $N = 261$ male offenders, age 45 and older, incarcerated in state managed prison facilities in Oklahoma. Hierarchical linear regression models were computed to determine whether psychosocial variables including stress, depressive symptomology, perceived closeness to God, and social support predict forgiveness beyond demographic and covariate

indicators. Although demographic indicators such as age, race, and education did not emerge as significant predictors of forgiveness, serving a life sentence as well as functional health status were relevant covariate indicators. Serving a life sentence ($B = .13, p < .05$) and functional health status ($B = .11, p < .05$) were positively associated with greater feelings of forgiveness. However, stress, closeness to God, and social support maintained significant associations with forgiveness above and beyond demographic and covariate influences. In particular, stress had a significant negative association with forgiveness ($B = -.29, p < .01$), whereas perceived closeness to God ($B = .34, p < .01$) and social support ($B = .15, p < .05$) were positively associated with forgiveness. It appears that serving a life sentence, maintaining functional health abilities, deriving a close relationship with God, and greater social support are related to greater feelings of forgiveness among aging male offenders, but greater stress diminishes forgiveness. The results have implications relative to the pastoral care and spiritual ministry of older male offenders.

RELIGIOUSNESS AND TRAJECTORIES OF PAIN INTENSITY AMONG COMMUNITY DWELLING OLDER ADULTS

N. Park¹, F. Sun², L. Roff³, D. Klemmack¹, M. Parker¹, H. Koenig³, P. Sawyer⁴, R. Allman⁴, *1. University of Alabama, Tuscaloosa, Alabama, 2. Arizona State University, Glendale, Arizona, 3. Duke University, Durham, North Carolina, 4. University of Alabama, Birmingham, Alabama*

Previous work indicates that individuals rely on religiousness in dealing with pain, but few studies have examined longitudinal trajectories of pain intensity and how religiousness may be associated with trajectories of pain. Further, no study has considered heterogeneity in trajectories of pain intensity. The purposes of this study were to: (1) test hypotheses about the multiple trajectories of pain intensity; and (2) examine how religiousness is related to different pain trajectories. A total of 720 community-dwelling adults aged 65 and older, participants in the UAB Study of Aging, were interviewed annually over three years. Pain intensity was assessed by a five point Likert scale, ranging from no pain to agonizing. Growth mixture modeling was used to classify trajectories of pain intensity. Three measures of religiousness (service attendance, prayer, and intrinsic religiousness) as well as age, gender, race, and rural residence were considered. Overall, intensity of pain decreased over three years. Most of community older adults reported no increase or decreasing pain intensity and some experienced increasing pain. Fit indices suggested a three-class model: (1) increasing ($n = 47$); (2) unchanging ($n = 292$); and (3) decreasing ($n = 381$). Higher levels of intrinsic religiousness were associated with higher levels of pain at baseline and were associated with a lower slope of pain trajectory among those with increasing pain ($p < .05$). Higher baseline service attendance was associated with a higher probability of decreasing pain ($p < .05$). Intrinsic religiousness and church attendance may have moderating effects on one's pain experience.

BENEFITS OF THE HEART, SOUL, MIND, AND STRENGTH PROGRAM: A QUALITATIVE ANALYSIS

M. Chandlee, H. Pope, R.E. McKeown, *Epidemiology and Biostatistics, University of South Carolina, Columbia, South Carolina*

From 2004-2007 the Heart, Soul, Mind, and Strength (HSMS) program was implemented in United Methodist churches in South Carolina. HSMS emphasized spiritual, mental, physical, and social health for adults 50 years of age and older. African American and Caucasian participants met weekly in small groups to promote overall health and embrace racial diversity. Each meeting began with a guided meditation accompanied by deep breathing and stretching to reinforce the holistic focus of the program, integrating spiritual, physical, emotional, and mental dimensions. It also provided a natural transition to the physical activity component which combined education, motivation, and brief exercise routines, after which the group moved on to mental exercises. The second half of each session was devoted to a curriculum for spiri-

tual growth. Additional activities included a community outreach effort. In 2008, researchers interviewed a total of 24 HSMS participants (12 African American (AA) and 12 Caucasian) across the state of South Carolina. The interviewers asked questions related to the participants' involvement in HSMS, social support received from participation, and outreach to the community. A qualitative analysis was performed using QSR- Nvivo software to identify themes in participant responses. The results showed that HSMS participation provided social support, spiritual perspective, and increased race relations in the group, the church, and community. In addition, the HSMS program facilitated participation of community outreach. These results support that faith communities may benefit from incorporating programs like HSMS to improve supportive networks, spiritual growth, community outreach, and health among a diverse older adult population.

CONCEPTS FOR INCORPORATING THE STUDY OF SPIRITUALITY INTO GERONTOLOGY

R.C. Atchley, *Miami University, Lafayette, Colorado*

Despite rapidly growing interest among elders in spirituality as an inner experience, motivator, and organizing principle for life-styles, gerontology has been slow to acknowledge the distinction between spirituality and religion and to adopt a nonsectarian language of spirituality into gerontological research. This poster will present concepts and language concerning the nature of spiritual experience and spiritual development, and the importance of spirituality in self-concept and identity for a major proportion of the aging population of the United States. It will also describe ways that spirituality motivates service and fosters community among aging adults.

METHODS OF SELF-FORGIVENESS AND EMOTIONAL RESPONSES IN OLDER ADULTS

M.M. Lee¹, G.M. Workman¹, D.E. Workman², V.L. Christian³, *1. Behavioral Medicine, Midwestern University, Downers Grove, Illinois, 2. Northwestern University, Evanston, Illinois, 3. Nationwide Children's Hospital, Columbus, Ohio*

Self-forgiveness can contribute to improved psychological well-being by increasing self-acceptance and reducing guilt in older individuals (Ingersoll-Dayton & Krause, 2005). This pilot study examined which methods of self-forgiveness are associated with enhanced emotional well-being (increased relief and decreased guilt). Community dwelling older participants (n= 49) completed a survey on self-forgiveness based on themes identified from previous research (Ingersoll-Dayton and Krause, 2005). Participants were presented with a structured list of cognitive and behavioral components of self-forgiveness and asked to indicate how often they use each method (0=not at all, 10=extremely often). They also rated how relieved and how guilty they felt after trying to forgive themselves (0=not at all, 10=extremely). Older adults who reported greater feelings of relief after trying to forgive themselves tried more often to forgive themselves unconditionally ($r = .70$), to correct their actions ($r = .64$), to be less self-critical ($r = .57$), and to consider good intentions related to their actions ($r = .44$). No significant correlations were found between feeling decreased guilt after trying to forgive oneself and the frequency that a particular self-forgiveness method was used. Results, though preliminary, suggest that certain methods of self-forgiveness endorsed by older adults are associated with an increase in the positive feeling of relief, but not necessarily with a decrease in the negative feeling of guilt. Clinical implications include teaching older adults such self-forgiveness methods to help elicit greater relief. In contrast, more research is needed to identify which methods help older adults reduce guilt in forgiving themselves.

SESSION 1485 (SYMPOSIUM)

VARIOUS WAYS OF INTEGRATING QUALITATIVE AND QUANTITATIVE METHODS IN CONDUCTING MIXED METHODS AGING RESEARCH

Chair: L.K. Donorfio, *Human Development and Family Studies, University of Connecticut, Waterbury, Connecticut*

Discussant: G.D. Rowles, *University of Kentucky, Lexington, Kentucky*

Last year the Qualitative Research Interest Group sponsored a symposium on the importance of using qualitative methods in mixed methods aging research. It was highly successful, with the audience suggesting a follow-up symposium this year undertaken cooperatively with the Measurement, Statistics, and Research Design Interest Group. An objective of the cooperative symposium is to highlight the advantages of being formally trained in both qualitative and quantitative disciplines. This symposium will present a balanced panel of researchers from both interest groups who have conducted aging research using mixed methods designs. The strengths and challenges of using both methods together will be discussed. Also addressed will be the thought processes that motivate the choice of a mixed method design, the ordering of the qualitative and quantitative components, and the integration of the qualitative and quantitative results. The symposium discussant will consider inherent challenges and barriers to conducting and communicating effective mixed methods research and will elaborate on how using mixed methods designs can deepen our understanding of aging issues.

MIXED METHODS AND LONGITUDINAL DATA

P.H. Van Ness, *1. Internal Medicine/ Geriatrics, Yale Program on Aging, New Haven, Connecticut, 2. Yale University School of Medicine, New Haven, Connecticut*

It is commonly noted that qualitative and quantitative data analysis can be complementary undertakings. This presentation provides an argument, a description, and an illustration regarding how one mixed method challenge can be most productively pursued. First, it is argued that calculating statistics on purposeful samples gathered for qualitative studies is usually misguided. Second, a description is given regarding how qualitative data analysis fits within a spectrum of "non-inferential" biostatistical procedures. Finally, the value of nesting a qualitative study within a quantitative study of longitudinal data is illustrated with reference to Dr. Terri Fried's qualitative study of functional disability among older adults conducted on a subsample (N=36) of participants from the 108-month wave (N=378) of Dr. Thomas Gill's Precipitating Events Project (PEP). The objective of this illustration is to show how qualitative and quantitative methods for longitudinal data can best be "mixed" to contribute to a rigorously self-corrective process of analytical reasoning.

QUALITATIVE RESEARCH STRATEGIES THAT FACILITATE QUANTITATIVE RESEARCH

D.J. Schulman-Green¹, R. McCorkle¹, E. Bradley², *1. Yale University School of Nursing, New Haven, Connecticut, 2. Yale University School of Public Health, New Haven, Connecticut*

In mixed methods studies, the qualitative component of the research can be used to inform the quantitative component. Qualitative research strategies can assist with accessing a study population, obtaining informed consent, and collecting high quality data. Such strategies are particularly valuable when employed in studies involving vulnerable populations by helping to reduce attrition and by limiting the need for proxy data. Specific qualitative research strategies will be presented and illustrated using examples from actual qualitative, quantitative and mixed methods research studies. Exemplary studies include an interview study with seriously ill individuals about the end of life, and a randomized controlled trial of women newly diagnosed with ovarian cancer.

SCIENTIFIC RIGOR: QUALITATIVE, QUANTITATIVE, AND MIXED METHODS DESIGNS

C. Irniter, *American Medical Association, Chicago, Illinois*

The objective of this presentation is to identify and describe successful collaborations between positive scientists and post-positive scientists and how to focus on answering the question. A case study of two research projects will highlight the importance of answering the research question with a rigorous scientific methodology, whether it is quantitative, qualitative or mixed method approach. Researchers are committed to investigate, evaluate, and synthesize phenomena; however, they are guided by demands of appealing to funders, policymakers, and review boards. This case study highlights the strengths and barriers to discover phenomena while using scientific rigor. Case A was designed as a mixed method approach, then redesigned to use only quantitative methodology. Case B was designed using a qualitative methodology to appeal to the funders, but required a mixed method design. It is evident that it is not about a “sexy” or “cutting edge” project, rather using the best methodology to answer the question.

ADDING QUALITATIVE DEPTH TO QUANTITATIVE DATA

A.B. Kydd, *Health Nursing and Midwifery, University of the West of Scotland, Hamilton, Lanarkshire, United Kingdom*

Quantitative research is useful for accessing large numbers of participants. Such an approach can address randomisation, control and manipulation. In a mixed methods study on health care professionals' attitudes towards health care professionals working with older people, 800 questionnaires were distributed. 360 completed questionnaires were returned. One finding was that 73% of respondents reported that professionals working solely with older people were deemed to have a lower professional status than those who worked in high technology areas. A variety of reasons were given. However, each questionnaire had an invitation for participants to be interviewed by the researcher. 27 participants were interviewed. The interviews explored the findings which revealed that professionals working with older people had high professional esteem. This and other findings added depth to the whole study and served to inform replication of the project which addressed these findings in the quantitative part of the new study.

SESSION 1490 (SYMPOSIUM)

WISDOM: INTEGRATION OF COGNITION, EMOTION, AND MOTIVATION

Chair: J. Gluck, *Alpen-Adria University Klagenfurt, Klagenfurt, Austria*

Discussant: U.M. Staudinger, *Jacobs University, Bremen, Germany*

Although the psychology of wisdom is still a relatively small field, several definitions of wisdom have been suggested. All of them emphasize that a high-level integration of cognitive, emotional, and motivational strengths is central to wisdom. The main goal of this symposium is to present empirical work on both the development of wisdom through life experience and on manifestations of wisdom in complex real-life situations. A common theme is the idea that a full understanding of wisdom (its development as well as its manifestations) will require going beyond one-sided wisdom conceptualizations that emphasize particular aspects of wisdom rather than its integrative nature. The broader aim of the symposium is to discuss the benefits of studying integrative concepts of wisdom in addition to more specific human strengths such as emotional maturity, superior information processing capabilities, or prosocial motivational orientations. In the symposium, Ardel and Vaillant present two longitudinal case studies investigating how level of wisdom may influence how individuals deal with life stressors. Glück et al. found in a nominator study that the manifestation of wisdom in real life requires cognitive and non-cognitive wisdom components. Kunzmann presents a study suggesting that the integrative nature of wisdom entails intellectual reflection and deep emotional experiences in response to exis-

tential life problems. Nicks and Blanchard-Fields show that adaptive self-regulation of emotional experience may require more cognitive resources in young than in older adults. Finally, Labouvie-Vief presents an integrative model of wisdom as a result of increasingly more complex emotional and cognitive schemes.

THE PRESENCE AND ABSENCE OF WISDOM IN EVERYDAY LIFE: EVIDENCE FROM TWO LONGITUDINAL CASE STUDIES

M. Ardel¹, G.E. Vaillant², *1. Sociology, University of Florida, Gainesville, Florida, 2. Brigham and Women's Hospital, Boston, Massachusetts*

How does the presence and absence of wisdom affect individuals' everyday lives over their life course? To find out, we conducted in-depth analyses of two white men who entered the 65-year longitudinal Study of Adult Development when they were sophomores at Harvard and who scored relatively high or low on measures of wisdom at both age 50 and 80. The basic characteristic of the high wisdom exemplar was a giving and generous attitude toward others even in times of crises. He saw life as beautiful and appeared genuinely happy throughout most of his life. The low wisdom exemplar, by contrast, was mainly concerned about his own well-being and social standing. As a consequence, he experienced feelings of anxiety, depression, and insecurity throughout his life. Although he attended psychotherapy since young adulthood, it seems that his self-centeredness prevented him from growing wiser. Paradoxically, only other-centeredness might ultimately lead to personal well-being.

COGNITIVE COSTS OF DOWN-REGULATING AND SUPPRESSING EMOTIONS IN OLDER ADULTS

B.S. Nicks, F. Blanchard-Fields, *Psychology, Georgia Institute of Technology, Atlanta, Georgia*

Emotion regulation is an adaptive process of self-regulation of emotional experience that may require cognitive resources. We examined the differences in performance on a working memory task (the 2-Back task) between older and young adults, when presented with different emotion regulation instructions. Preliminary findings on the data suggest that the cognitive costs of down-regulating and suppressing emotions are higher for young adults than for older adults. Effective emotion regulation in older adults will be discussed in terms of the wisdom gained for promoting emotionally satisfying interpersonal interactions.

COGNITIVE AND AFFECTIVE ASPECTS OF WISDOM AS PERCEIVED BY OTHERS: EVIDENCE FROM A NOMINATION STUDY

J. Gluck¹, S. Bluck², I. Strasser¹, S. Koenig¹, K. Naschenweng¹, U. Redzanowski¹, *1. Alpen-Adria University Klagenfurt, Klagenfurt, Austria, 2. University of Florida, Gainesville, Florida*

In a new model of the development and manifestation of wisdom, Glück and Bluck have proposed four interactive resources which dynamically interact over the life span in fostering the growth of wisdom through experience of and reflection upon difficult life events. Currently, the model is being tested in two research projects at Alpen-Adria University Klagenfurt by interviewing wisdom nominees about challenges they have encountered in their life. Participants were recruited by media calls for nomination of wise individuals, and nominators were interviewed elaborately about the person they have nominated. The data show that while some nominators' general characterizations of the nominees tend to emphasize cognitive aspects, accounts of personal experiences with them almost always emphasize the interaction of cognition with non-cognitive aspects such as empathy and value orientations.

EMOTIONAL DEVELOPMENT AND THE EMERGENCE OF WISDOM: A LIFE-SPAN VIEW

G. Labouvie-Vief, *University of Geneva, Geneva, Switzerland*

In this talk I examine wisdom developmentally, as a life-long process of increasing integration of cognition and emotions. Each life stage of wisdom brings a mutual of these two systems, resulting in the formation of schemas that are both complex cognitively and integrated emotionally. Cognitively, original automated emotion schemas oriented towards self-preservation are progressively empowered by increasing capacities of intentionality, meta-awareness, and self-other differentiation and awareness of commonality-within-diversity. Emotionally, these understandings are integrated by deeply felt emotions about core human values that tie together diversity in self and others. That transcend self and extent to progressively generalized "others" I illustrate this progression with research examples of the development of empathy and morality to propose a developmental trajectory of levels of wisdom from early childhood to late life. These levels, although somewhat idealized, also aid in defining sources of cognitive and social-emotional variability that prevent the emergence of true wisdom.

WISDOM: THE INTEGRATION OF COGNITION AND EMOTION

U. Kunzmann, *University of Leipzig, Leipzig, Germany*

Recent wisdom models suggest that wisdom entails an integration of reflection and emotion, but empirical evidence is still sparse. In this talk I present a study in which wisdom has been assessed by asking participants to "think aloud" about existential life problems presented in hypothetical vignettes. The responses were rated according to several wisdom criteria, including awareness of uncertainty, value relativism, contextual thinking. Subsequent to the assessment of the reflective aspects of wisdom, participants were asked to view films of adults adjusting to existential losses and their actual emotional reactions to these films were assessed. Individuals high on reflective wisdom responded with greater sadness to the films than individual low on reflective wisdom; they also showed greater empathic concern and higher empathic accuracy. Together these findings support the idea that the wise individual not only reflects upon negative emotions, but also endures actual negative emotions in the self and others.

SESSION 1495 (SYMPOSIUM)

CULTURAL, RELIGIOUS, AND PHYSICIAN-RELATED BARRIERS TO END OF LIFE CARE

Chair: S. Enguidanos, *Davis School of Gerontology, University of Southern California, Los Angeles, California, Partners in Care Foundation, San Fernando, California*

Discussant: R.D. Brumley, *Kaiser Permanente, Downey, California*

Similar to other disparities experienced in our health care system, numerous barriers exist that prohibit access to end of life care programs such as Hospice and palliative care for minority populations. While several studies have investigated patient-related barriers such as cultural, religious, and educational, little attention has been given to physician barriers that impede access to end of life care. This symposium will begin by providing a conceptual framework that describes the interrelated factors associated with accessing end of life care. Following this presentation, findings will be presented from quantitative and qualitative studies investigating the relationship between (1) physician perceived barriers to referral of patients to an inpatient palliative care program, (2) relationship between physician religious background and spirituality and self-reported patient referral to end of life care, and (3) the relationship between ethnicity and perceived quality of life among terminally ill individuals enrolled in a home-based palliative care program. Implications of these models and studies will be discussed in terms of physician and hospital roles in improving access to end of life care services for terminally ill patients, and in particular, minority pop-

ulations. In addition, indications for future research and interventions will be presented.

THE IMPACT OF PHYSICIAN RELIGION AND SPIRITUALITY ON PERCEIVED BARRIERS TO PALLIATIVE & HOSPICE CARE

M. Siciliano¹, S. Enguidanos¹, R.D. Brumley², *1. Leonard Davis School of Gerontology, University of Southern California, Los Angeles, California, 2. Kaiser Permanente, Downey, California*

This research examines the influence of physician-reported religion and spirituality on physician perception of patient barriers to receiving end-of-life (EOL) care. Although many patients desire palliative or hospice care at EOL, barriers limit referral of patients to these programs. A survey administered to 554 physicians working in a managed care organization in Southern California revealed four types of barriers: physician-related, patient-focused, family-oriented, and administrative. Ranging in age from 30 to 74 years old, these physicians represented a variety of medical specialties, including family medicine (29.1%), internal medicine (21.7%), surgery (7.8%), and other specialties (41.4%). Physicians rated their own spirituality using a 5-point scale ranging from "not at all" to "extremely," and indicated their membership in one of the following religions: Protestant, Roman Catholic, Jewish, Muslim, Buddhist, Hindu, unaffiliated with any religion, or "other." We will examine the associations between religion and spirituality and perceived patient barriers to EOL care.

PHYSICIAN AND NURSE PERCEPTIONS OF A NEW INPATIENT PALLIATIVE CARE CONSULTATION PROJECT

P. Housen¹, S. Enguidanos^{2,1}, R. Goldstein³, *1. Partners In Care Foundation, San Fernando, California, 2. University of Southern California, Los Angeles, California, 3. Kaiser Permanente Bellflower Medical Center, Bellflower, California*

The purpose of this paper is to report the perceived impact of a new inpatient palliative care team consultation service on hospital practice after one year. We conducted focus groups drawn from a purposive sample of physicians (2 groups; total n=16) and nurses (2 groups; n=17) at a large urban managed care medical center. Structured interview protocols elicited participant perceptions regarding the impact of implementation. Focus groups were audiotaped and transcribed verbatim. We analyzed the data using grounded theory techniques to elicit themes and sub themes. Four overarching themes emerged regarding the positive and/or transformational impact of the program on: patient/family services, medical staff, the hospital, and quality of care. Two additional themes, time and barriers, pertained to perceived challenges. The findings are potentially useful for improving services at hospitals where palliative care consult services are offered, or provide guidance for hospitals where such programs are being considered.

RACIAL AND ETHNIC BARRIERS TO END-OF-LIFE CARE: A CONCEPTUAL MODEL

J.R. Laguna, S. Enguidanos, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Current literature indicates that most minorities do not receive end-of-life care. Additionally, evidence of barriers to health care for minorities, as well as related outcomes, has been well documented. However, minimal work has described the interconnectedness of multiple variables associated with access to end-of life care. Drawing from this pool of research, we propose a conceptual model in which service use and related patient outcomes are the product of patient-level, provider-level, and system-level barriers. Notably, the model introduces an innovative mediating factor: provider personal characteristics. Wherein, provider personal characteristics (e.g. gender, religion) are considered key in explaining minority access disparities to end-of-life care. This model offers a significant contribution to the literature by synthesizing much

of the previous research to propose a series of explanatory factors that account for the disparities in end-of-life care usage.

WILL A HOME-BASED PALLIATIVE CARE PROGRAM IMPROVE THE QUALITY OF LIFE AMONG TERMINALLY ILL PATIENTS?

T. Yan, S. Enguidanos, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

This study assessed the effectiveness of a home-based palliative care program, a randomized controlled trial, on improving the quality of life among terminally ill patients with cancer, heart disease, and chronic obstructive pulmonary disease with a life expectancy of one year or less. Data were analyzed using a pretest-posttest design to compare changes in the intervention group to changes in the control group and by race/ethnicity. The Functional Assessment of Cancer Therapy (FACT-G) Scale was used to measure quality of life. 208 patients were included in the pretest analysis. No statistically significant improvements were found on the overall quality of life at the 30-day ($p=.69$) and 60-day ($p=1.00$) posttests. Minorities, however, significantly improved their physical well-being at the 30-day ($p=.008$) and the 60-day ($p=.02$) posttests. The study suggests that there is an ethnic difference in improving palliative care at the end of life.

SESSION 1500 (SYMPOSIUM)

DON'T GO THERE: PREVENTING EXCESS HOSPITALIZATION (2009 REP SYMPOSIUM)

Chair: T. Teasdale, *Dept of Geriatric Medicine, University of Oklahoma, Oklahoma City, Oklahoma*

Discussant: N. Giunta, *Hunter College School of Social Work, New York, New York*

Failures to effectively manage chronic conditions and recognize early signs of diminished capacity may increase the need for hospitalization. Poorly handled care transitions often lead to re-hospitalization. This symposium uses an interactive panel discussion format to examine ideas and approaches for reducing hospitalization among the elderly. Speakers from Nursing, Social Work, and Medicine have expertise in home care, assisted living, long-term care, acute care, and care transitions. Backgrounds include research, education, clinical practice, and program administration. Each will give a brief discipline-specific perspective of the major drivers of excess hospitalization. These will be followed by a dynamic, moderator-led, question/answer discussion designed to advance audience understanding of precipitating factors, how the problem is being approached, and what solutions are on the horizon. Audience commentary will be encouraged. For example, improvements in home and community based care mean that more people can avoid or delay living in skilled nursing homes, but it also means that residential care facilities now serve people with higher acuity. When hospitalization is required, the benefits of treatment, preventive care, and early recognition of new symptoms may be lost without appropriate transitional care to minimize re-hospitalization. Panelist examples of new approaches include Community Partnerships for Older Adults, funded by the Robert Wood Johnson Foundation, which helps communities meet the needs of older adults by identifying gaps in essential services and developing ways to fulfill unmet needs. Also, improvements in care transitions, including new coaching models and tool-kits to reduce hospitalizations from LTC will be described and assessed.

MODELS OF CARE TRANSITION INTERVENTIONS TO REDUCE RE-HOSPITALIZATION

P. Boling, *Virginia Commonwealth University, Richmond, Virginia*

Depending on the diagnosis, re-hospitalization within 30 or 60 days occurs in 5 to 30 percent of Medicare patients; in home health care patients overall, 1 in 7 is hospitalized within 2 weeks of starting home care. 3-fold variations are noted between providers and systems after

adjusting for case mix which tells us of opportunities for improved outcomes. Correctable causes of failed care transitions center on problems with medication reconciliation, care continuity, communication, and access to care providers empowered to modify the plan of care on an active, ongoing basis. The presentation will address the respective benefits of coaching models and more intensive care management by medical transitional care teams, and targeting of appropriate patients for the different models. Cost savings ranging from \$500 per patient within 6 months to \$5,000 per patients within a year have been reported in robust clinical trials.

TOOLS AND TIPS FOR NURSES TO REDUCE HOSPITALIZATIONS IN THE NURSING HOME

E. Flaherty, *Village Care of New York, New York, New York*

This discussion will focus on best nursing practice in long term care to help reduce avoidable hospitalizations. This can be accomplished through the use of specific everyday tools that facilitate decision making and help to identify early warning signs of illness in the nursing home. Imbedding these tools into everyday practice requires a comprehensive education program for all nursing bedside staff.

THE ROLE OF COLLABORATION AND COMMUNITY PARTNERSHIPS IN TRANSITIONAL CARE AND PREVENTING EXCESSIVE HOSPITALIZATION

N. Giunta^{1,2}, J. Fecondo³, 1. *School of Social Work, Hunter College, New York, New York*, 2. *Brookdale Center for Healthy Aging & Longevity, New York, New York*, 3. *University of California, San Francisco, San Francisco, California*

Collaboration and coordination among home and community-based service providers has been receiving increased attention in both research and practice. Evidence is growing that there is substantial value-added when collaboration occurs through partnerships, including in the area of care transitions and prevention of hospitalization. As the moderator of this symposium, I will facilitate the interactive panel discussion by posing questions to presenters to ensure multidisciplinary perspectives on preventing excess hospitalization. During the discussion, illustrations of best practices nationwide in care transitions and collaborations for preventing excess hospitalizations will be shared.

HOSPITALIZATIONS FROM AN ASSISTED LIVING FACILITY OVER A FIVE YEAR PERIOD

A. Pruchnicki, *St. Vincent's Hospital, New York, New York*

At the Lott Assisted Living Facility in New York City, over five years, hospitalizations decreased from 149 per year to 96, but then gradually increased to 121 by the end of the period. Total hospital days dropped from 1377 to 809 before increasing to 1672 over the same period. Although the decreases may have been due to increased on-site physician presence, the reason for the subsequent increases is not clear. Possible increasing physician obligations, nursing and other staff turnover, or increased resident nursing and medical needs may be responsible. The last point of increasing resident needs is now being examined by a chart by chart review of resident histories. In the future, there may be significant conflict between resident wishes to avoid hospitalizations and nursing home placement, and increased medical conditions which necessitate them.

FAMILY CAREGIVING - HS PAPER SESSION

EFFECTS OF REIKI INSTRUCTION ON DEMENTIA CAREGIVERS' STRESS MANAGEMENT

D.L. Morris, C.B. Warner, *University Center on Aging & Health, Case western Reserve University, Cleveland, Ohio*

The purpose of the study was to explore the effects of teaching REIKI relaxation techniques to family caregivers to manage stress related care of a loved one with dementia. Classes were taught once a week for four weeks. Pre- and post-test, one group study was carried out. Participants completed self-administered questionnaires on the first and last day of class; mailed questionnaires were completed 4 weeks after class ended. The convenience sample of 81 caregivers included 73 women. Age ranged from 28 to 90 with an average age of 61. The average time as a caregiver was 5 years with a median of 4 years; 34 were daughters; 31 were spouses; 7 other; 4 daughters-in-law, 1 son; 1 sibling; and 1 cared for a friend. Care recipients' mean age was 80.7 years with a range of 58 to 96 years; with 41 females and 39 males. Eighteen lived in a nursing home; 37 lived with the caregiver; 16 another family member; 5 in assisted living; and, 3 lived alone. There were no significant changes in caregiver stress and burden scores. The depressive symptoms scores increased at Time 2 but were not different at the end of the study. There was a decrease in caregiver perceived stress and burden. The caregivers' quality of life scores increased. Caregivers' reported of reaction to care recipients' behaviors decreased for behaviors related to depression and memory problems. A larger, comparison group study is being developed.

CHILD HEALTH OUTCOMES IN SKIPPED GENERATION GRANDPARENT FAMILIES

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Recent attention by the public health community to the role of grandparents in raising grandchildren has increased awareness of the prevalence of grandparent families, but research on the health outcomes of grandchildren in these unique families has been sparse. Furthermore, exploration of health promoting behaviors of grandparent caregivers as it relates to their grandchildren has been equally neglected. The purposes of the present study were (1) to explore grandchild health outcomes in grandparent families, (2) to explore grandparent concerns about grandchild health, and (3) to assess grandparent parenting habits which could affect grandchild health. Focus groups and individual interviews were conducted with grandparent caregivers and grandparent medical/social service providers from a large metropolitan city in the west in order to learn more about improving grandchildren's health. A health survey asking questions about grandchild health and grandparent parenting habits was also distributed. Participants included: 14 grandparent caregivers in two focus groups; 7 grandparent caregivers in individual semi structured interviews; and 4 key informants serving grandparent families in individual semi structured interviews. 52 grandparents completed surveys on grandchild health and family dynamics related to health outcomes. Our findings show that grandparent caregivers were greatly concerned about behavioral and mental health problems as well as child development and learning. Grandchildren had high prevalence rates of ADHD (25%), depression (16%), and asthma (18%). A health promoting environment for grandchildren was frequently inhibited by lack of financial resources and knowledge of the subject matter. Implications of the findings for interventions are discussed.

LIVING WITH ALZHEIMER'S DISEASE: CAREGIVERS' DEEPEST FEELINGS

H.C. Bursch, H. Butcher, *Nursing in Aging, University of Iowa College of Nursing, Iowa City, Iowa*

Aim: The purpose of this analysis of caregiver journals was to extract themes spontaneously occurring in reflections about their deepest feelings regarding the caregiving experience. **Background:** Caring for the patient with Alzheimer's disease presents existential and ethical challenges to family caregivers. Healthcare providers' understanding of the caregiver experience is derived mainly from surveys, closed-ended questions and standardized psychometric instruments, leaving the internal discourse of caregivers unexplored. **Method:** 24 journals were analyzed in the framework of Paul Ricoeur's philosophy of ethics based on the concept of personal identity. In keeping with Ricoeur's theory of interpretation, text analysis proceeded through distanciation, naïve reading, structural analysis, critical reflection and appropriation. **Results:** All caregivers spontaneously reflected upon the illness story and themes in friendship, self esteem, capacity to act, authenticity of the patient and the ethical intention. Relationship conflict as well as negative states in self perception and autonomy were associated with depression and/or anger and resulted in the caregiver's inability to find human fulfillment and self actualization. **Implications:** Findings are interpreted in philosophical frameworks of ethical demands and natural love between humans. Engaging the text within Ricoeur's ethically sensitive philosophy and methodology yielded transformative understanding of the essence of caregivers' deepest feelings regarding their daily discourse with Alzheimer's Disease.

TIME TRAVEL: THE EXPERIENCE OF MEALTIMES FOR FAMILY CAREGIVERS OF INDIVIDUALS WITH DEMENTIA

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Mealtimes are governed by a rich and ancient set of rituals set by culture and refined by family practice. When meals are defined only by nutritional intake, the larger experience of meals is neglected. The purpose of this phenomenological study was to describe the essential structure of the lived experience of mealtimes for family caregivers of persons with dementia. Twenty family caregivers who fed loved ones with late stage dementia (GDS 6-7) were recruited from the community (n=8) and two nursing homes (n=12), and were interviewed regarding their subjective experiences using unstructured, open-ended interviews. Using Colaizzi's method, data were analyzed: significant statements were extracted, clustered into themes, and integrated. Findings indicated that mealtimes served as a time machine, propelling caregivers backward and forward from pleasing memories of the past, to all consuming tasks of the present, to a foreboding and uncertain future. Three themes emerged. First, food and meals was a vehicle that triggered memories of past events, relationships, and the world before dementia. Second, meals and feeding provided stark evidence of their current world, which consisted of concern about the provision of adequate nutrition and a desire to nurture and love through food. Finally, mealtimes propelled caregivers to the future for which they felt sorrow and uncertainty. Healthcare providers can serve as guides as caregivers journey through time, helping them bridge the world that once was with the reality of the present, and provide anticipatory guidance to navigate future and complex decisions about feeding at the end of life.

COMPARATIVE PSYCHOLOGICAL HEALTH OF PRIMARY CAREGIVERS OF HOME-BASED OLDER ADULTS WITH DEMENTIA

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Currently, approximately 30 million people are estimated to have dementia worldwide with a new case diagnosed every seven seconds. The majority of individuals with dementia are cared for by their family or informal caregivers. Across the world, caregiving is a challenging task and the impacts of caregiving have been identified as financial and physical, as well as psychological. This cross-national study sought similarity and differences of the psychological health (caregiver burden, depression, loneliness, and caregiver reward) of primary caregivers of home-based older adults with dementia in India, Taiwan, and the United States. The study was guided by the Framework for Psychological Health of Caregivers of Adults with Dementia. A sample of 167 participants was interviewed by native occupational therapists. Through ANOVA it was found that caregivers in the three countries vary in their characteristics, but their caregiving characteristics were similar. Using ANCOVA, Indian caregivers had the lowest level of all aspects of adverse psychological health outcomes: Caregiver burden ($F=13.983, p<.001$), depression ($F=10.623, p<.001$), loneliness ($F=15.103, p<.001$). Although statistically similar, Taiwanese caregivers exhibited clinically worse outcome than American caregivers. Economic development does not necessarily improve psychological health of caregivers of adults with dementia. Where new lifestyles do not sustain traditions, caregivers especially suffer financially and psychologically to keep their care recipients with dementia at home. Society will continue depending on these caregivers for the care of older family members. Effective unique to each country as well as common interventions for the three countries were identified for the purpose.

SESSION 1510 (POSTER)

HEALTH CARE

MEETING THE HEALTHCARE NEEDS OF OLDER VETERANS IN RURAL AREAS: THE ELKO DEMONSTRATION PROJECT

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Providing meaningful healthcare services to persons living in rural communities is a major public health concern that involves re-defining the traditional facility-based model of care delivery commonly employed in urban areas. This issue has important public health implications for the Veterans Administration (VA) since it is estimated that approximately two million veterans—40% of the overall veteran population—live in areas defined as rural or highly rural. The Elko demonstration project represents an effort to build a collaborative infrastructure between local rural community leaders and the VA to meet the needs of older rural veterans. Older veterans in Elko, Nevada set the project in motion when they voiced their needs for greater access to VA healthcare resources despite their geographic distance (>230 miles) from the Salt Lake City VA Medical Center. The project utilized an expanded Community-as-Partner model as a basis for coordinating local community resources and VA services to open a clinic that provided limited healthcare services (e.g., medication management, prescription refills, and routine lab tests) one-half day per week in Elko. Veterans ($N = 84$; Male- $N = 82$; Service in Vietnam- $N = 41$; Mean Age = 64.57) averaged 2.84 visits to the clinic during its first year of operation. Initial outcomes suggest this model has potential for meeting the healthcare needs of older rural

veterans. Recommendations for expanding this model to address a greater range of healthcare needs among veterans in Elko, and for implementing this model in other rural settings, are provided.

OPTIMIZING INTERDISCIPLINARY DEMENTIA CARE IN AN ACADEMIC OUTPATIENT SETTING

D.S. Geldmacher, R. Nathan, A.A. Thompson-Heisterman, C. Manning, *University of Virginia, Charlottesville, Virginia*

Current principles for dementia care (e.g. from the American Association of Geriatric Psychiatry) emphasize the roles of combined pharmacologic and nonpharmacologic approaches to “improve quality of life, support dignity, control symptoms, and provide comfort.” A novel interdisciplinary outpatient approach was developed at the University of Virginia to address these principles in longitudinal dementia care. The approach represents a partnership between the Schools of Medicine and Nursing, the hospital, and the local chapter of the Alzheimer’s Association. In this model, clinicians from multiple disciplines are onsite during the clinic day. The primary team consists of a Neurologist, Neuropsychologist, Geriatric Psychiatrist, Geriatric/Mental Health Nurse Practitioner, Nurse Coordinator, Social Worker and Alzheimer’s Association representative. The historical and conceptual foundations for the model, based on needs assessment of the patients and their family caregivers will be addressed. Case examples will demonstrate how patient and family-completed questionnaires facilitate individualized approaches to care, using case conferences to assign the appropriate disciplines to each patient/family and ongoing formal and informal (curbside) interactions among staff to flexibly address changes in needs and priorities. Steps taken to achieve economic viability in this clinic will be reviewed in light of its intensive use of professional personnel operating on both fee-for-service and salary bases. Specific clinical examples will illustrate the complex team interactions. Using this intensive interdisciplinary team approach allows establishment of meaningful relationships with patients and their caregivers, facilitating beneficial diagnostic and treatment outcomes, while remaining economically feasible in an academic health center outpatient setting.

READMISSION RISK FACTORS IN OLDER HOSPITALIZED PATIENTS: EFFECT OF FRIDAY DISCHARGE ON READMISSION

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Background: To identify factors that are associated with readmissions in elderly adults. Inpatient discharges occurring on Friday may be associated with increased hospital readmission due to 1) larger discharge volume 2) decreased time for discharge planning and 3) increased wait time to receive care at home. **Methods:** A retrospective cohort of patients 65 years old and older admitted to Johns Hopkins Hospital in 2007 was created from administrative data ($n=6610$). Records were abstracted for 180 days post-discharge to determine readmission rates. A multivariate Cox proportional hazards model was used to assess time to first readmission comparing patients discharged on Friday to all others, adjusting for demographics, healthcare utilization and multimorbidity. **Results:** The most discharges were performed on Friday (20%), and the majority of patients were discharged home with self-care only (72%). Overall, 1582 of 6610 patients (24%) were readmitted within 180 days. Multivariate Cox proportional hazards model showed Friday discharge was associated with an increased hazard of readmission $HR=1.07(.94-1.22)$, but was not statistically significant ($p=.303$). In our study, African-American race ($HR=1.16(1.02-1.33) p=.029$), admission in the prior month ($HR=1.95(1.42-2.68) p<.001$), discharge home with self-care only ($HR=1.21(1.05-1.38) p=.007$), and admission to medical service ($HR=1.45(1.30-1.63) p<.001$) were independent predictors of readmission. **Conclusions:** While the study did not find Friday discharge to be an independent risk factor for readmission, the results suggest that

there is increased risk in sending vulnerable patients home prior to the weekend.

UNDERSTANDING THE DISCHARGE PROCESS: AN OBSERVATIONAL, TIME-AND-MOTION STUDY OF AN INPATIENT GERIATRICS UNIT

S. Ramsaroop, C. Reid, E. Siegler, *Geriatrics, Weill Cornell Medical College, New York, New York*

Background/ Purpose: Hospital discharge is often a poorly understood and chaotic process that is vulnerable to miscommunication and errors. This study sought to identify and describe all the participants, elements and workflow of the discharge process at our institution. **Design:** A continuous quality improvement study of the geriatrics unit of a tertiary care hospital. **Methods:** This study consists of two phases: 1) Shadowing unit personnel to describe workflow, identify and quantify tasks performed in the discharge process and 2) Focus groups with unit staff to investigate attitudes about the discharge process. Independent observers used process mapping and time-motion study techniques for phase one. **Results:** Thus far, observations (n=14) reveal an average of 7 people interact for each patient discharge (range= 4 to 11). There is substantial variation between order of steps and delegation of responsibilities (e.g., medication reconciliation, informing patients of discharge), so that one process map cannot adequately capture the discharge process. Time- motion analysis reveals significant variation in the time required to complete discharge tasks. For example, medication review with patients ranges from 10 minutes to 45 minutes, and completion of a Patient Review Instrument for nursing home placement requires between 15 and 60 minutes. For each task initiated the average number of interruptions is 3 (range 0 to 7). **Conclusions:** Our current discharge process is complex and time-consuming, leading to variability in its execution. Analysis of our current processes will allow us to create interventions that can streamline the discharge process, minimize error, and ultimately improve patient outcomes.

SESSION 1515 (SYMPOSIUM)

MEN WITH HIP FRACTURE, AN INCREASING PROBLEM: HOW ARE THEY DIFFERENT FROM WOMEN WHO FRACTURE?

Chair: D. Orwig, *Epidemiology and Preventive Medicine, University of Maryland School of Medicine, Baltimore, Maryland*

Over the next 40 years, the number of men sustaining hip fractures in the United States will more than double, from approximately 65,000 today to 140,000 in 2050. Despite this rapid increase, little is known about the consequences of hip fracture in men, with most current practice based on clinical experience and research on women. In this symposium, we will describe initial findings from two NIA-sponsored studies designed to increase knowledge about hip fractures in men to the same level as it is in women or beyond, by studying 200 men and 200 women aged 65 and older admitted for surgical repair of a hip fracture. Using the newest technologies available, all subjects undergo an extensive questionnaire including cognitive measures, a comprehensive assessment of function (self-report and performance tests), body composition using bone densitometry (DXA) and computed tomography (CT), and have blood drawn. Data are collected at baseline (within 22 days of admission) and again at 2, 6 and 12 months post-admission. Preliminary data based on 82 men and 82 women with a mean (SD) age of 80.6 (8.5) and 82.8 (7.3) years, respectively enrolled as of May 31, 2008 will be presented. Preliminary data show that there are interesting differences in baseline demographics, cognitive status, other psychosocial factors, frailty, and body composition between men and women at time of fracture which may play a role in eventual recovery 1 year later. These data will be discussed by Dr. Jack Guralnik, National Institute on Aging.

SEX DIFFERENCES IN BONE MINERAL DENSITY IN A HIP FRACTURE POPULATION

J. Chan, M. Hochberg, R.R. Miller, M. Shardell, W. Hawkes, J. Magaziner, D. Orwig, *Epidemiology and Preventive Medicine, University of Maryland, Baltimore, Maryland*

Men achieve a greater peak bone mass resulting in a lower risk for hip fracture than women, yet they experience higher rates of morbidity and mortality post-fracture. Gender comparisons of bone mineral density (BMD) following fractures are limited. 113 participants (51 men, 62 women) had baseline BMD measures of the contralateral hip (femoral neck [FN] and total hip [TH]) using bone densitometry. More women had used bone-active medications in past 6 months than men (72.0% vs 27.9%, 72.0% vs. 56.3%, and 40.2% vs. 6.1% calcium and vitamin D, and bisphosphonates, respectively). The average BMD T-scores for women were lower than men (-2.46 vs -2.08 and -2.27 vs. -1.72 for FN and TH, respectively). Although men had higher mean BMD than women at the time of fracture, the small number of them on bone-active therapies indicates more attention should be focused on treating men both before and following hip fracture.

BASELINE PSYCHOSOCIAL DIFFERENCES BETWEEN MEN AND WOMEN AFTER HIP FRACTURE

A.L. Gruber-Baldini, M. Matheny, J. Lloyd, N. Chiles, D. Orwig, M. Hochberg, J. Magaziner, *University of Maryland School of Medicine, Baltimore, Maryland*

Baseline data were collected within 22 days of hospitalization in 80 men and 84 women with hip fracture. Variables examined included age, education, marital status, Modified Mini-Mental Status (3MS), Trails A & B, Hooper Visual Organization Test (HVOT), Center for Epidemiologic Studies Depression Scale, Resilience Scale, Life Orientation Test (Optimism), and pre-fracture ratings of Yale Physical Activity Survey (YPAS), social activities, social contact, activities of daily living (ADLs), and instrumental ADLs (IADLs). Women were more cognitively impaired on Trails B/A ratio (46.3% 3+ vs. 28.3%), although men were slower on Trails A (104.5+/-72.7 vs. 83.4+/-51.6 seconds) and more impaired on HVOT (16.2+/-6.0 vs. 18.2+/-6.4). Men were more often married (52.5% vs. 26.8%), less often lived alone (27.5% vs. 48.8%), had less social contact (22.3+/-13.8 vs. 29.9+/-15.0), less physically active (YPAS 2667+/-2616 calories vs. 4272+/-4486) and more IADL impaired (2.3+/-1.5 vs. 1.8+/-1.6) than women. Other variables were not significantly different.

THIGH MUSCLE COMPOSITION FINDINGS 2 MONTHS AFTER ADMISSION FOR HIP FRACTURE

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No data exist on thigh muscle composition and quality following hip fracture. CT scans of the mid-thigh were obtained in 43 subjects (25 men) two months after admission to the hospital post-hip fracture. The thigh musculature on the ipsilateral (fractured) compared to contralateral side demonstrated significantly lower muscle attenuation and smaller total cross-sectional area (CSA), including CSA of normal density (NDM) and low-density muscle (LDM) (P<0.0001 for all comparisons). Compared to women, men had significantly higher measures of muscle attenuation (P<0.0003) and greater muscle CSA: total CSA (P<0.001) and NDM (P<0.0001), but not LDM (P= NS). Significant differences between the fractured and non-fractured thighs were observed consistent with muscle atrophy and fatty-infiltration on the side of fracture. These changes may be important in the poor functional recovery after hip fracture.

PRE-FRACTURE MARKERS OF THE FRAILTY SYNDROME AMONG MEN AND WOMEN WHO FRACTURE A HIP IN THE BALTIMORE HIP STUDY 7 (MALE HIP) COHORT

D. Andersen, D. Orwig, *University of Maryland Baltimore, Baltimore, Maryland*

Prevalence of frailty markers prior to hip fracture in both men and women were retrospectively examined in 80 male and 82 female hip fracture patients using standardized operationalizations to identify possible gender differences. Overall, 28%, 28%, 17%, and 32% of the sample scored positively for weight loss, low physical activity, weakness, and exhaustion, respectively. Low physical activity ($p=0.06$) and weakness ($p=0.04$) were reported more often for men than for women. Complete frailty data were available for 129 participants. Sixty percent of men and 51% of women had at least one of four frailty markers present prior to the fracture. More men (35%) than women (36%) had exactly one component present; the proportion of men and women with >1 component were almost identical. Important differences exist between men and women for individual components. Whether these differences influence frailty incidence or outcomes post-fracture will be subsequently determined during follow-up assessments.

SESSION 1520 (POSTER)

METHODS

FACTORS THAT AFFECT THE CRITERIA FOR ASSESSING VO2MAX IN MIDDLE AND OLD AGE POPULATIONS

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PURPOSE: The purpose of this study was to clarify the factors that affect the criteria for assessing VO2 max in middle and old age populations. **METHODS:** The total of 25 members of middle and long distance male runners ranging in age from 46 years to 69 years old. Each participants run on treadmill for 3 minutes at a constant speed, starting speed of 150m/min, followed by 1 minute rest, and the stages proceeded with increasing speed for 30m/min each until the participant was exhausted. O2 consumption, CO2 excretion, ventilation rate, CO2/O2ratio, blood lactate level, and heart rate were monitored. Criteria for assessment of VO2 max included: 1) HR in excess of age-predicted maximum ($220 - \text{age}$), 2) respiratory exchange ratio (RER) >1.1 , and 3) plateau ($<2.0\text{ml/kg/min}$ increase) in VO2 with an increase in workload. If at least two of the three criteria were met, the highest VO2 measured was chosen as the subject's VO2 max. Multiple regression analysis was used for factors to explain if the participants meet the criteria to reach VO2 max. **RESULTS:** There were 3 participants who reached all three criteria to assess VO2max, 14 participants reached 2 criteria, 6 participants reached only 1 criteria, and 2 participants did not reach any criteria with this study. Therefore, 17 participants reached the criteria, and 8 did not. CO2/O2 ratio was chosen as the factor that can explain if the person reach the VO2max. (independent variables; CO2/O2 ratio, estimated maximum heart rate- actual heart rate, the improvement of VO2 after the exercise.) Moreover, the factors to explain the criteria for CO2/O2 ratio was maximum ventilation volume and blood lactate level (independent variables; VO2max, maximum heart rate, maximum running speed, age). The participants who reached the criteria of VO2 max had higher HR, CO2/O2 ratio, blood lactate level compared with participants who did not when they reached the exhaustion. **CONCLUSIONS:** Respiration function was the factor affecting the criteria of assessing VO2max with middle and old age populations.

ADDRESSING DATA ANALYSIS CHALLENGES IN A PRELIMINARY CLINICAL DRUG TRIAL

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Phase-II clinical trials of pharmacologic agents are used to assess drug safety and tolerability in the target treatment population. They also support sample-size estimation for further efficacy trials. These exploratory efficacy analyses are problematic for several reasons related to small samples: randomization may not result in similar groups; subject attrition effects are magnified, especially in longer-term longitudinal trials; and distributions of outcome measures are often non-normal. We report our approach to these challenges in the analysis of an 18-month, double-blind, randomized, controlled trial of a potential Alzheimer's disease treatment. At baseline, treatment-group $N=15$ and control-group $N=14$; four subjects withdrew before study completion. To address subject attrition, the "Last Observation Carried Forward" approach was used, resulting in a more conservative test of group-differences. Six clinical outcomes were assessed; most had highly skewed distributions. Traditional transformations of the data (e.g., square root) did not satisfactorily improve the shapes of the distributions. To make the data distributions more normal, the percentage change from baseline to 18-months was computed for each outcome. The technique offered improvement over traditional transformations. Groups differed in age, despite randomization. Age was therefore dichotomized and included as a factor in analyses. Data were subjected to a series of 2×2 between-subjects ANOVAs with factors being group and age. This overall approach proved responsive to: (1) small sample-sizes; (2) subject attrition; (3) baseline differences between groups; and (4) non-normal distributions. This approach also allowed computation of sample sizes needed for sufficient power to establish the treatment's efficacy in future trials.

AN EXAMINATION OF SALIVARY CORTISOL SAMPLING PROTOCOL FOR ASSESSING IMPACT OF STRESS ON CAREGIVERS

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Biomarkers show great promise in research concerning links between health and well-being and a host of potential stressors in older persons, and there is a need to calibrate and validate the connections between self-reporting methods in conjunction with biomarkers. One such biomarker is salivary cortisol, a reliable and noninvasive measure of hypothalamic-pituitary-adrenal (HPA) axis function. Cortisol sampling protocols vary considerably across studies. This presentation describes a pilot investigation of salivary cortisol sampling protocols to determine efficient and meaningful schedules for examining the impact of stresses associated with managing work and caregiving. Employed caregivers ($N=12$) and noncaregivers ($N=19$) completed psychosocial self-report measures (e.g., personality, work demands/rewards, caregiving demands/rewards, coping and SF-36 perceived health). Subjects provided cortisol samples at 6 specified daily intervals across a full week (7 days) and additional measures were calculated (e.g., awakening, work cessation, mean daily cortisol, and area under the curve (AUC)). Cortisol measures were examined for: a) ability to distinguish the two groups, and b) relationships with psychosocial measures. Some correlations between psychosocial variables and cortisol could be identified even with a relatively small sample of 31. Differential weekday and weekend cortisol response profiles were evident. Discrete cortisol measures were correlated with different variables, but no one set of measures yielded meaningful comparisons with most work or caregiving variables. Session attendees will be able to discuss the value of salivary cor-

tisol in assessing stress patterns in caregivers, efficient cortisol sampling strategies, and further research needs.

IS SELF-REPORTED BODY MASS INDEX A VALID AND RELIABLE MEASURE IN OLD AGE? FINDINGS FROM THE LONGITUDINAL SWEDISH ADOPTION/TWIN STUDY OF AGING

A. Dahl¹, L.B. Hassing², E. Fransson¹, N.L. Pedersen^{3,4}, 1. *Institute of Gerontology, School of Health Sciences, Jönköping, Sweden*, 2. *University of Gothenburg, Gothenburg, Sweden*, 3. *Karolinska Institute, Stockholm, Sweden*, 4. *University of Southern California, Los Angeles, California*

The objective of the study was to evaluate the validity and reliability of self-reported height, weight, and body mass index (BMI) over time in old age. Seven hundred seventy-four men and women aged 40 to 88 at baseline (mean age 63.9) participated in the Swedish Adoption/Twin Study of Aging. Height and weight were self-reported in a questionnaire and measured by experienced research nurses five times over 20 years. BMI was calculated as weight (kilos)/height*height (meter). There were high correlations between self-reported and measured height (0.97-0.98), weight (0.97-0.98), and BMI (0.93-0.95) at each measurement occasion, and substantial agreement for BMI as a categorical variable (Kappa coefficient 0.72-0.81). Mean differences ranged from 0.9-1.2 cm for height, 0.5-1.7 kilogram for weight, and 0.5-1.0 kg/m² for BMI. Latent growth curve modeling showed a significant but small increase in mean difference between self-reported and measured values over time for height (0.4 mm/year), and BMI (0.02 kg/m²/year), but not for weight. Women underestimated their weight and BMI, and tended to overestimate their height to a greater extent than men. Overweight and obese elderly persons underestimated their BMI to a greater extent than their normal weight counterparts. In old age, there is an increase in the mean difference between self-reported and measured BMI, which is likely due to unawareness of changes in height. However, the increase in mean difference for BMI is small, 0.4 kg/m² over twenty years. The inaccuracy of BMI does not substantially increase over time.

NORMAL RECTAL, ORAL, EAR-BASED AND AXILLARY TEMPERATURE IN THE SENIOR DWELLERS OF NURSING HOMES

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Purpose: The purpose of this study was to verify whether the older is colder. We examined the effects of measurement routes, gender and age on normal body temperature values of senior dwellers in nursing homes. Design: A prospective, descriptive and correlational design. Method: A total of 308 subjects between 65 and 102 years old were recruited from 17 nursing homes in Taiwan Taipei city during November 2007 to March 2008. Rectal, oral, ear based, axillary and ambient temperatures were simultaneously measured between 8 a.m. to 10 a.m. by electronic infrared thermometer and electrical thermometer. Results: The average rectal, oral, ear based, and axillary temperatures were 37.00, 36.86, 36.41, and 36.52°C, respectively. Both ear-based (SD=0.45, range= 34.3~37.3°C), and axillary (SD=0.40, range= 35.3~37.5°C) temperatures have higher variability (wide range and large standard deviation). The body temperature measured from four different sites had statistically significant difference between males and females. Females' body temperatures were higher than males. Weak relationship between age and rectal temperature ($r = 0.194$, $p = 0.028$) was found. There was no significant relationship between age and body temperature taken from other routes. Conclusion & Suggestions: The hypothesis "the older is colder" was not confirmed. The senior dwellers of nursing home were not certainly lower in body temperature. In addition, body tempera-

tures taken from rectal sits and of female were slightly higher. The results of this study can be assessing body temperature of the elders in geriatric setting. Keywords: Axillary temperature, Ear based temperature, Nursing home, Oral temperature, Rectal temperature, Senior

PAIN RESEARCH GONE BAD: CONFESSIONS FROM SOMEONE WHO SHOULD HAVE KNOWN BETTER

P.H. Berry, *College of Nursing, University of Utah, Salt Lake City, Utah*

Significant pain is common among community dwelling elderly and nursing home residents. While it is likely that pain is common among assisted living (ALF) residents, it has not been studied. Practice guidelines suggest the use of the Brief Pain Inventory Short Form (BPI-SF), a multidimensional assessment originally developed for use with cancer outpatients, to assess pain in older adults. The aims of the study were to: 1) estimate the prevalence and characteristics of pain among ALF residents; 2) estimate the prevalence of dementia as measured by the mini-cognitive assessment; 3) assess the usefulness of the BPI-SF in assessing pain in ALF residents; and 4) explore the relationships of pain and pain intensity with age and cognitive status. 64 residents from 4 ALFs completed the Mini-Cognitive Assessment, The BPI-SF, and demographic questionnaires. Assistance was provided if needed. Then mean age was 81; most were Caucasian (91%) and female (86%). 53% reported pain; of those, nearly half reported severe pain. A significant relationship existed between the presence or absence of pain as reported on the BPI and the mini-cognitive assessment score. While the 0-10 scale is thought to be appropriate for most older adults, the initial long and complicated screening question on the BPI may not be suitable for many older adults. A simpler screening question may be more appropriate, especially for those who are older, frail and cognitively impaired. There is clearly a need for pain management improvement for this older and often frail population which should begin with accurate assessment.

SESSION 1525 (SYMPOSIUM)

OBJECTIVE PHYSICAL PERFORMANCE IN GENERAL POPULATION SAMPLES AND CLINICAL PATIENTS: PROGNOSTIC VALUE AND CLINICAL UTILITY

Chair: S. Volpato, *Clinical and Experimental Medicine, University of Ferrara, ITALY, Ferrara, Italy*

Discussant: J. Guralnik, *Laboratory of Epidemiology, Demography, and Biometry, Bethesda, Maryland*

In older people, objective measures of physical performance are an excellent way of identifying patients at risk of future adverse events. There is convincing evidence that different measures of physical performance, including walking speed, balance, and strength are sensitive tools to identify older community-dwelling adults and primary care patients at higher risk of functional decline, hospitalization, and mortality. Functional evaluation is a cornerstone of multidimensional geriatric assessment; however, performance-based measures have not been incorporated in routine clinical evaluation of older patients so far. This symposium investigates the prognostic value of different performance measures (4-meter gait speed, 400-meter walk test, Short Physical Performance Battery, grip strength) in different settings, including population-based samples and acutely ill clinical patients. Data from five large population-based cohort studies will be presented to examine the prognostic value of walking speed for survival (NHANES, Iowa EPESE, Hispanic EPESE, PEP and InCHIANTI). Furthermore, data from the InCHIANTI study, the ALIVE Study, and the PEGASO study will be presented to demonstrate the potential role of objective physical performance measures as indicators of disease severity and as prognostic tools in hypogonadal men, HIV-infected patients and geriatric inpatients, respectively. This symposium will provide new evidence to increase our understanding of the utility of performance-based measures as clinical instruments for in-depth functional evaluation and risk stratification as

well as early warning signs of impending problems in different clinical scenarios.

GAIT SPEED PREDICTS LONG TERM SURVIVAL: A META-ANALYSIS

S. Studenski¹, S. Perera¹, K.V. Patel², J. Chandler³, J. Guralnik², *1. University of Pittsburgh, Pittsburgh, Pennsylvania, 2. NIA, Bethesda, Maryland, 3. Merck Co, Blue Bell, New Jersey*

Gait speed (GS) might be a useful predictor of survival in older humans. We pooled data from 4 cohort studies: NHANES (n= 3958), Iowa EPESE (n= 2128), Hispanic EPESE (n=1905) and PEP (n= 491), all followed for 10-15 years. Baseline GS was calculated from a 4M walk or converted from an 8-foot walk. Survival was ascertained by national and social security death indices. Age-adjusted HRs were computed by study, and then combined using random effects models. Of 8482 subjects (age 76.4±6.6, 55% F, 9.3% B, 29.9% Hispanic), every 0.1 m/sec increase in GS reduced mortality risk by 12% (HR=0.88±.05, p<0.0001). GS predicted survival in subgroups; age, gender, race, education, BMI, hospitalization, self-reported health, arthritis, heart disease and diabetes. HRs ranged from 0.85-0.91. GS is a powerful predictor of survival in older adults with consistent effects in subgroups. GS could be useful in the clinical setting for estimating life expectancy.

WALKING PERFORMANCE AND SUBSEQUENT MORTALITY RISK IN OLDER ADULTS

S. Vestergaard¹, K.V. Patel^{1,2}, S. Bandinelli³, L. Ferrucci⁴, J. Guralnik¹, *1. Laboratory of Epidemiology, Demography, and Biometry, National Institute on Aging, Bethesda, Maryland, 2. MedStar Research Institute, Hyattsville, Maryland, 3. Geriatric Unit, ASF, Florence, Italy, 4. Longitudinal Studies Section, Clinical Research Branch, National Institute on Aging, Baltimore, Maryland*

Objective: To examine the relationship between performance in the 400 meter walking test and mortality. Methods: Participants are ≥ 65 years, from the InCHIANTI study (n=948). Time to complete the 400-m walk, 20-m lap time coefficient of variation(CV), need to rest during the test, and ability to complete the walk were assessed. All-cause mortality was ascertained over a 6-year follow-up period. Data were analyzed with proportional hazard logistic and linear regression analyses. Results: In age- and sex-adjusted analyses all 400-m walking test variables except need to rest were associated with mortality. After further adjusting for cognitive function, symptoms of depression, education, smoking, body mass index, being sedentary/minimally active, disease burden, and lower extremity performance, both time to complete the 400-m walk and lap time CV were significant independent predictors of mortality. Conclusion: Multiple aspects of performance in the 400-m walk test provide complementary information on mortality prognosis in older persons.

HIV INFECTION, IMMUNE FUNCTION, AND PHYSICAL PERFORMANCE AMONG INJECTION DRUG USERS

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Background: HIV has evolved into a chronic condition; however, the functional consequences of infection and the increasing burden of age-associated comorbidity have not been well characterized in this aging population. Methods: Cross-sectional data on 1,279 injection drug users (IDUs) in Baltimore, Maryland participating in the ALIVE Study were analyzed using linear regression to examine hand grip strength and walking speed. Results: Participants were 48 years old on average (IQR: 43-52), 34% women, 90% black, and 29% HIV infected. Adjusting for age and sex, HIV infection was associated with decreased grip strength (b = -2.7 kg; p<0.001) and decreased walking speed (b = -0.06 m/s; p=0.047). In those infected with HIV (n=373), lower CD4 cell counts

were significantly associated with decreased grip strength; whereas, higher plasma viral load was significantly associated with decreased walking speed. Conclusion: HIV infection and progression of immune dysfunction is associated with poor physical function among IDUs.

GONADAL STATUS AND PHYSICAL PERFORMANCE IN OLDER MEN

M. Maggio¹, G. Ceda¹, F. Lauretani¹, S. Bandinelli², S. Basaria³, J. Guralnik⁴, G. Valenti¹, L. Ferrucci⁵, *1. University of Parma, Department of Internal Medicine, Section of Geriatrics, Parma, Italy, 2. Rehabilitation Unit, Azienda Sanitaria di Firenze, Florence, Italy, 3. Division of Endocrinology & Metabolism, Boston University School of Medicine, Boston, Massachusetts, 4. Laboratory of Epidemiology, Demography, and Biometry, National Institute on Aging, National Institutes of Health, Bethesda, Maryland, 5. Longitudinal Studies Section, Clinical Research Branch, National Institute on Aging Intramural Research Program, National Institutes of Health, Baltimore, Maryland*

Male aging is characterized by decline in testosterone levels and physical performance that may facilitate poor mobility and disability. Despite many recent consensus reports on hypoandrogenism, the relationship between physical performance and gonadal status has not been investigated. We evaluated 410 older men of InCHIANTI Study (Italy) with complete data on testosterone, muscle strength and short physical performance battery (SPPB). According to testosterone, 3 different groups were created: 1) severely hypogonadal (N= 20) with testosterone <230 ng /dl; 2) moderately hypogonadal (N=75) (testosterone >230 and <350), and 3) eugonadal (N=297) (testosterone > 350). In age and BMI adjusted analysis, we found a significant difference in hand grip strength and SPPB score (p for trend<0.001) among three groups, with severely hypogonadal men having lower levels of these parameters. In older men, hypogonadal status defined as testosterone levels below 230 ng/dl is associated with lower objective measures of physical performance measures, independently of age and BMI.

PREDICTIVE VALUE OF PERFORMANCE-BASED FUNCTIONAL ASSESSMENT IN OLDER HOSPITALIZED PATIENTS

S. Volpato¹, F. Sioulis¹, M. Cavalieri¹, G. Guerra¹, R. Fellin¹, J. Guralnik², *1. Clinical and Experimental Medicine, University of Ferrara, ITALY, Ferrara, Italy, 2. Laboratory of Epidemiology, Demography and Biometry, National Institute on Aging, NIH, Bethesda, Maryland*

We assess the ability of the Short Physical Performance Battery (SPPB) to predict hospitalization, death and functional decline in older patients in the year after discharge from the hospital. We enrolled 92 women and men aged 65 and older able to walk and with a MMSE score ≥ 18, admitted to the hospital for an acute medical event. Participants were evaluated with SPPB (range 0-12) at hospital admission, were re-evaluated the day of hospital discharge. The mean age of the sample was 77.2±6.3 years; 51.2% were women. Mean SPPB score at discharge was 7.12±3.0. After full adjustment, the SPPB score at hospital discharge was inversely correlated with the rate of decline in ADL performance over the follow-up (p=0.022). Forty-eight (55.8%) patients were re-admitted to the hospital and 11 (12.8%) have died over the follow-up. In multivariable logistic regression analysis, patients with better SPPB score at hospital discharge (score:8-12) had a lower risk of hospitalization or death (OR: 0.19, IC 95% 0.06-0.62) compared to patients with the lowest SPPB score (0-4). In older acute geriatric patients the SPPB provides important prognostic information. Lower-extremity performance-based functional assessment might identify older patients at high risk of poor outcomes after hospital discharge

SESSION 1530 (SYMPOSIUM)

THE USE OF IN-HOME MONITORING SYSTEMS TO ENHANCE AGING-IN-PLACE

Chair: *C.M. Galambos, School of Social Work, University of Missouri, Columbia, Missouri*

Discussant: *E.S. McConnell, Duke University School of Nursing, Durham, North Carolina*

This symposium examines the use of in-home monitoring systems to detect and monitor changes in the health status of older adults residing in an independent living facility. Three specific technologies will be discussed. The first paper will present the use of an integrated sensor network to detect early illness through the use of motion and bed sensors that identify patterns of activity and behavior. This data can be used to generate alerts and monitor health status. Density map visualization is another system that can be used to track activity including time away from home. Using motion sensor data, different color schemes are created which represent varying activity levels. The third method uses an automated estimation of activity levels based on silhouettes extracted from video data. The symposium will include information on the successes and pitfalls of using these methods to enhance aging-in-place and quality of life.

USING INTEGRATED SENSOR NETWORKS FOR EARLY ILLNESS DETECTION

M.J. Rantz, M. Skubic, G. Alexander, M. Aud, B.J. Wakefield, S.J. Miller, J.A. Krampe, *University of Missouri, Columbia, Missouri*

Integrated sensor networks have been installed in 19 apartments of residents at TigerPlace, a specially designed senior living facility affiliated with the University of Missouri. The integrated sensor network includes motion sensors and a bed sensor which measure presence in the bed as well as restlessness, qualitative pulse, and qualitative respiration while the participant sleeps. A non-clinical research associate examined sensor data before and after known adverse health events such as falls, hospitalization, and emergency room visits with a goal of detecting patterns which could be used to generate alerts and monitor on-going health status of the residents. In several cases, there were patterns in the data that were confirmed by a nursing expert which could be used to prompt registered nurse care coordinators to assess the resident further and offer early interventions which may have delayed or prevented the adverse health event.

AUTOMATED ESTIMATION OF ELDER ACTIVITY LEVELS FROM ANONYMIZED VIDEO DATA

N.M. Harvey, Z. He, Z. Zhou, J.M. Keller, *University of Missouri-Columbia, Columbia, Missouri*

Significant declines in quality of life for elders living in assisted living communities are typically triggered by health events. Given the necessary information, such events can often be predicted, and thus be avoided or reduced in severity. Overall activity levels may be a useful predictor of these events. Quality of life may be improved through automatic assessment and activity level tracking of older adults. This paper presents a method of automated estimation of activity levels based on silhouettes segmented from video data. This method involves subsequent extraction of higher order information from the silhouettes. Through the building of a regression model based on higher order information, this system can automatically track elder activity levels.

MONITORING ACTIVITY LEVEL WITH DENSITY MAP VISUALIZATION

S. Wang, C.M. Galambos, M. Aud, M. Skubic, *University of Missouri, Columbia, Missouri*

This paper describes on-going work in capturing and analyzing sensor data from sensor networks deployed in the homes of older adults, at TigerPlace senior living facility. Sensor data is visualized in the form

of activity density maps which tracks activity including time away from home. Different colors are used to represent different levels of density in motion sensor data. Various activity levels of residents can be observed from density maps ranging from sedentary lifestyles to active lifestyles. Changes in activity level can be linked to physical and mental health declines. This presentation will also include a computational method to calculate similarity of density maps used to determine changes in activity patterns over time.

SESSION 1535 (POSTER)

CAREGIVING AND INTERGENERATIONAL RELATIONSHIPS

THE EFFECTS OF FAMILISM AND CULTURAL JUSTIFICATION ON THE MENTAL AND PHYSICAL HEALTH OF FAMILY CAREGIVERS

P. Sayegh, B.G. Knight, *Department of Psychology, University of Southern California, Los Angeles, California*

This study used path modeling on the data of 95 African American and 65 White caregivers to examine how burden and coping styles mediate the relation between 3 specific cultural values (the Familial Obligations and Perceived Support from the Family factors of familism and the Cultural Justification factor) and caregivers' mental and physical health. Main outcome measures included depression and other psychological symptoms and physical health (self-report and cardiovascular indicators). Consistent with the hypothesis, Familial Obligations had an indirect effect on poor mental and self-reported physical health outcomes via avoidant coping. Contrary to the hypothesis, Perceived Support from the Family had no effect on any health outcomes. Cultural Justification was associated with active coping yet did not demonstrate the hypothesized protective effect on health outcomes. This cultural value was unexpectedly associated with avoidant coping as well, which resulted in poor mental and self-reported physical health outcomes. None of the cultural values had significant associations with burden or had any effect on cardiovascular indicators. These findings suggest that Familial Obligations may account for a significant proportion of the negative effects of familism on caregivers' health in the stress and coping process and that Perceived Support from the Family's impact may be relatively inconsequential. Additionally, Cultural Justification's unanticipated negative effect on caregivers' health may also stem from feelings of obligation to provide care based on strong cultural values and beliefs. It also appears that cultural values do not operate through burden to affect caregivers' health outcomes in the stress and coping process.

MAKING AN IMPERFECT MATCH: ASSESSING RESIDENTIAL LIVING FACILITY RESIDENTS' PHYSICAL ACTIVITY PROGRAM EXPECTATIONS

M. Roe, D.B. Bradley, *Western Kentucky University, Bowling Green, Kentucky*

Village Manor is medium sized independent retirement community in rural Kentucky. When the community was built in the late 1980's, designers did not anticipate residents' long term physical activity needs. In order to meet the needs of current and future residents, both resident physical activity levels and their expectations were examined. The Physical Activity Scale for Elderly (PASE) was administered ($n = 96$) to develop a profile of current physical activity. Three focus groups were held to develop themes relating to residents' current physical activity program desires. Results showed that compared to the theoretical physical activity recommendations for this age group (mean age = 88; 64-98), resident's current activity levels were less. At the same time, their desires for specific physical activity programs (type, length, intensity) were not being met. This presentation concludes with recommendations for fitness area enhancement to increase the likelihood of residents meeting proposed physical activity levels.

THE PROTECTIVE ROLE OF A LIVING SSPOUSE OR PARTNER AGAINST NURSING HOME ENTRY FOLLOWING A FALL IN OLDER ADULTS

J.R. Laguna, B. Steinman, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Falls in older adults often act as catalysts to nursing home entry. Whereas, some studies have shown that size of support networks may delay or preempt entry into nursing homes, others point to the importance of compositional quality of the support network (i.e., the type of relationship) in avoiding institutionalization. To determine the relative effect of marital status (composition) compared to number in household (size) with respect to their protection against nursing home entry, following a fall, data from five consecutive waves (1998 thru 2006) of the Health and Retirement Study were analyzed. Participants were included in analyses if they were 70 years or older and reported having fallen in the two-year period preceding the 1998 wave. Controlling for sociodemographic variables, and medical conditions, we used Cox regression to determine risk of entering a nursing home in subsequent waves. The effects of two levels of support network (spousal/partner and number in household) were tested. Results suggest that the presence of a spouse/partner provides greater protection from entry into nursing homes after a fall than size of network. Consequently, older unmarried/unpartnered persons may benefit from public support services that enhance compositional quality of support networks, potentially resulting in reduced future costs to the health care system.

THE LARIMER COUNTY ALLIANCE FOR GRANDFAMILIES: AN EVALUATION OF A COLLABORATIVE APPROACH

C.A. Fruhauf, K. Bundy-Fazioli, J. Miller, A. Bruce, *Human Development & Family Studies, Colorado State University, Fort Collins, Colorado*

Grandparents who raise grandchildren have specific needs that often are not met by service providers. In an effort to meet the needs of grandparents who live in Larimer County, Colorado, in 2007 a team of committed community members and grandparents established the Larimer County Alliance for Grandfamilies (LCAG). The LCAG's mission is to support the health and well-being of grandfamilies through community education, development of support systems, and advocacy for change. To better understand the LCAG's collaborative approach, an evaluation was conducted measuring the impact on individuals and the community 13 months after the initiation of the LCAG. Of the 36 community members who attended the annual planning meeting, 28 participants completed the survey. A majority of respondents stated that the LCAG has had a moderately high to high impact on their knowledge of grandfamily needs and resources, skills to influence public policies, ability to solve and respond to grandfamily problems, and knowledge of services/best practices for grandfamilies. Further, participants' answers to open-ended questions, included a variety of positive impacts including community coordination of financial resources, increased community awareness of grandfamily issues, building partnerships, and grandparent empowerment. Based on responses to survey questions, the LCAG has benefited individuals who serve grandfamilies, the community, and the grandparent providers in the county.

GRANDPARENTS RAISING GRANDCHILDREN: ETHNIC AND HOUSEHOLD DIFFERENCES IN HEALTH AND SERVICE USE

E. Namkung, *School of Social Work, Washington University in St. Louis, St. Louis, Missouri*

Purpose: The purpose of this study was to compare the characteristics of grandparent caregivers from different ethnicities and household structures, and to explore the associations between these two factors and their health or the use of public income support programs. Design and Methods: With the 2005-2007 American Community Survey (ACS), White, African American, Asian American, and Hispanic grandparent

caregivers in skipped generation and three-generation households were compared. In multivariate analysis, sequential three models for each measure of health (medical problems, ADLs limitation, limitation in working, limitation in going out, and cognitive impairment) and public program use (recipient of public financial assistance and food stamp) were executed. Results: Even though higher rates of health limitations in African Americans and grandparent caregivers living in skipped generation household were evident, these negative aspects were positively shifted when their demographic and caregiving duration factors were adjusted. Only Hispanics in skipped generation households continuously showed higher limitations in health compared to Whites in the households. African Americans and Asian Americans in skipped generation households were less likely to receive public financial assistance compared to Whites and Hispanics in the households. Implication: Findings suggest that health or social service practitioners and public policy makers should approach to at-risk ethnic grandparent caregiver groups in a culturally competent manner. Public income support programs could be considered to outreach to underserved groups such as African Americans and Asian Americans in skipped generation household.

MATERIAL HARDSHIP IN HOUSEHOLDS HEADED BY GRANDPARENTS CARING FOR GRANDCHILDREN

H.H. Park, *Social Welfare, Kangnam University, Yongin, Gyeonggi-do, Korea, South*

Previous research suggests that grandparent-headed households are at high risk for poverty. Debate continues about measures to appropriately capture economic condition and material hardship is one of the alternatives to the traditional federal poverty threshold (FPT) approach. Nevertheless, little is known about the prevalence of hardship in grandparent-headed households. This study examines the extent to which grandmothers experience hardship, considering the presence of grandchild's parent and poverty status, and explores factors of likelihood of hardship. Data on a pooled sample of 1,647 grandmothers from the National Survey of America's Families are analyzed. Ten measures of hardship are identified in four areas: food insecurity, housing issues, unmet health care needs, and telephone disconnection. Overall, food insecurity appears to be the most prevalent hardship (41%), followed by housing instability (25%), unmet health care needs (14%) and telephone disconnection (13%). Poor and low-income single grandmothers are vulnerable to food insecurity whereas across poverty level, substantial percentages of skipped-generational households report experiencing housing hardship (from 33% of those living in poverty to 12% of those with income >300% of FPT). Multivariate logistic regression results show that greater likelihood of hardship is significantly associated with grandmother's younger age, membership of racial minority group, being single, poor physical health, having a disability, raising grandchildren with behavior problems, and living in poverty. Findings suggest that public policymakers and practitioners should consider the measures of material hardship in order to identify grandparent-headed households most in need of help and provide needs-based services to alleviate their economic problems.

THAI FAMILIES CARING FOR DEPENDENT OLDER ADULTS: BEYOND HANDS-ON-CARE

N. Wongsawang¹, B.J. Bowers², *1. Mahidol, Bangkok, Thailand, 2. University of Wisconsin-Madison, Madison, Wisconsin*

As life expectancy increases, Thai families are decreasing in size, and Thai women are entering the workforce in large numbers. Consequently families in Thailand face increasing challenges in caring for dependent older adults. With few external resources to assist caregiving families, and a strong sense of family obligation, Thai families continue to provide most of the care. The purpose of this pilot study was to explore how Thai families care for dependent older adults and the consequences of caregiving. A grounded dimensional analysis was used to conduct the study. Data were collected through face to face and tele-

phone interviews. Several members of three Thai families participated in this pilot study. Findings suggest a complex set of strategies used to engage in several distinct types of caregiving, and a carefully orchestrated system of taking on, adapting and relinquishing caregiving roles. This study precedes an ongoing research project comparing family caregiving in traditional families with caregiving that occurs in transitional families which tend to be smaller with few family members available to provide hands-on care. The study has implications for public health providers and policy makers in designing strategies to support families and prevent the negative impact of family members. This has important health implications for both caregiving families and dependent older adults.

COMMUNICATION IN LIFE-LIMITING ILLNESS: CAREGIVERS' VIEWS ON THE TIMING OF FAMILY CONFERENCES

D. Waldrop, *School of Social Work, University at Buffalo, Buffalo, New York*

Family conferences are important means for helping caregivers understand the progression of a life-limiting illness. This poster will present the results of a study in which family caregivers' were asked about when, during the course of a terminal illness, they received information and guidance from healthcare providers. During in-depth interviews, 59 caregivers of people who were over age 65 and died from cancer within two weeks of hospice admission were asked open-ended questions about when they had conferences with providers and how they gained awareness that the illness was terminal. Qualitative data analysis was used to develop themes which describe participants' experiences of what was supportive, how providers helped or hindered the family's decision-making process about hospice admission and for their suggestions on improving communication between healthcare providers and families. The poster presents an illness trajectory framework from diagnosis through death with key waypoints that caregivers identified as important times for meaningful conversation with healthcare providers. Each waypoint will be illustrated by the themes that emerged from participants' descriptions about what was needed at that time on the trajectory of a loved one's illness. Specifically, the type and timing of family-provider communication needed are illustrated in caregivers' words. Family caregivers' retrospective reflections on how they developed awareness that a loved one's illness was terminal are a central aspect of patient-centered and family focused care. The results present implications about the importance of understanding of how family conferences can help families understand and prepare for an approaching death.

INTERGENERATIONAL SOCIAL SUPPORT, CONFLICT AND MENTAL HEALTH OF OLDER ADULTS IN NEPAL: EVIDENCE OF SYNERGIC EFFECTS

R. Gautam, *University of Massachusetts Lowell, Lowell, Massachusetts*

The aim of this study was to examine the association of late life intergenerational relationships on depression in older adults. The study also explored how the association between conflict and depression was moderated by the solidarity variables. A cross-sectional quantitative study of 489 (247 males; 242 females) older adults aged 60 and older in Nepal was conducted with face-to-face interviews using structured instruments. The dependent variable, depression, was measured by the widely used Geriatric Depression Scale with a Cronbach's reliability coefficient of 0.93 in the present study. The multiple regression analyses illustrated the main and synergic effects of support and conflict on depression. The results illustrate that those women who received lower emotional ($b = 1.03$, $\beta = .08$, $p < .05$) and instrumental ($b = 1.27$, $\beta = .09$, $p < .05$) support from their son were significantly more likely to be depressed compared to men receiving lower support. Women reporting lower anticipated support ($b = 1.33$, $\beta = .10$, $p < .05$) and higher conflict ($b = -.055$, $\beta = -.08$, $p < .05$) were likely to be more depressed than

men. The second-order synergic effect of conflict by emotional support received ($b = -.21$, $\beta = -.08$, $p < .05$) and emotional support provided ($b = -.30$, $\beta = -.12$, $p < .005$) indicated that emotional support received and provided buffered against the deleterious effects of conflict with depression in older adults. The health and policy implications are discussed in the context of an Asian developing country.

CAREGIVING AND AGE: HOW DO THESE FACTORS SHAPE OUR DAILY TIME USE?

K.J. Johnson, J. Mutchler, J. Burr, E. Johns, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

We examine the time adults spend in informal caregiving at different ages and compare the time-use patterns of informal caregivers and noncaregivers in different age groups. Previous studies have investigated the time use of mothers and fathers, and have shown that mothers spend more time caring for children than fathers, who spend more time in paid work. However, these studies have not taken into account additional forms of caregiving, such as childcare by grandparents and adult caregiving. The data for this study come from pooling the 2005 and 2006 American Time Use Study, which collects time-diary information on the amount of time persons spend on a wide range of activities during a 24-hour period. The study sample consists of adults 18 and older ($N = 23,131$). Daily activities are grouped into seven categories: caregiving (physical care to an adult and any care of a child), productive (excluding caregiving), social, physical, personal, domestic, and leisure. As expected, on an average day a greater number of adults are providing care to a child compared to an adult: 37% and 3% respectively. The results show that child caregivers have a mean age of 39 and spend an average of 2.2 hours caregiving per day, while people providing adult caregiving have a mean age of 52 and spend 1.4 hours caregiving per day. Controlling for gender, different time distributions emerge between caregivers and noncaregivers of different ages, particularly in the productive and leisure activity areas. The findings are discussed using the index of dissimilarity.

TIES THAT LEGALLY BIND: HOW GRANDPARENTS MAKE DECISIONS REGARDING THEIR LEGAL RELATIONSHIPS WITH THE GRANDCHILDREN THEY ARE RAISING

T. LaPierre, *The Gerontology Center, University of Kansas, Lawrence, Kansas*

According to the 2000 census, 5.7 million grandparents lived with their grandchildren and 42% of them reported that they had primary responsibility for minor co-resident grandchildren (Simmons & Dye, 2003). While many of the grandparents raising their grandchildren have informal caregiving arrangements there are a number of options for more formal legal relationships including formal kinship care, adoption, legal custody, legal guardianship, and legal consent (George, 2003). Each of these options affords different legal rights to the grandparents and the biological parents, and in the absence of a legally recognized relationship the grandparents have no rights as caregivers and may have difficulty accessing financial assistance, health insurance and healthcare for the grandchild, enrolling them in school, and protecting them from the child's parents (Wallace, 2000). In-depth interviews with 20 grandparents raising their grandchildren were analyzed to explore what factors influence grandparent caregivers' decisions regarding the legal relationship they have with the grandchild they care for. Particular attention was paid to how the legal and policy climates surrounding grandparent caregivers interact with individual and family level characteristics in making these important decisions. The choice of legal relationship was highly influenced by family context, knowledge and beliefs about available options, financial constraints, procedural requirements that include declaring their child an unfit parent or going after them for child support and level of involvement with social services. The positive and negative consequences of having a particular legal relationship are also discussed, as well as implications for policy and practice.

SESSION 1540 (SYMPOSIUM)

OLLIE RANDALL SYMPOSIUM: CREATIVE APPROACHES TO INTEGRATING FALL PREVENTION RESEARCH, POLICY AND PRACTICE INTO HEALTHY AGING

Chair: C. Cicero, *Gerontology, University of Southern California, Los Angeles, California*

Discussant: M. Tinetti, *School of Medicine, Yale University, New Haven, Connecticut*

Invoking the theoretical framework from the classic public administration work of John Kingdon, this symposium recognizes the open policy window of opportunity created jointly by the new Obama administration and its interest in health reform, the imminent agedness of the Baby Boomer cohorts, and the nation's growing financial burden caused by escalating health care costs and governmental budget deficits. Solutions to the public health problem of older adult falls require creative approaches to integrating prevention into healthy aging policies. Fall Prevention, in the social, political, and economic contexts of a Healthy Aging Agenda, encourages positive personal behaviors, promotes disease and injury prevention, and addresses the significant costs of demographic change. Specifically, this session will address the three strands of agenda setting and policy formation as they relate to building a case for fall prevention in creative approaches to healthy aging. Analysis of the current prevalence and projected costs of the public health problem of falls will set the stage for a responsive healthy aging agenda. An exploration of advocacy and interest groups' political influence will support an expert consensus for building a fall prevention infrastructure into neighborhood, local, state, federal programs and policies, including health care reform. Presenters will feature evidence-based interventions implemented in interdisciplinary practice settings including community based public health, geriatric medicine, exercise science, and urban planning/housing. The distinguished discussant will integrate concepts presented and offer final suggestions for capitalizing on the policy window of opportunity and incorporating fall prevention into a healthy aging agenda.

EVIDENCE-BASED ADVICE FOR INCORPORATING FALL PREVENTION INTO HEALTH REFORM: A VIEW FROM THE VETERANS ADMINISTRATION

L.Z. Rubenstein, *GRECC, UCLA-VA, Sepulveda, California*

As a government run health insurer with reported higher levels of customer satisfaction than the private sector, the Veterans Administration (VA) has been cited as a model for health care reform. This presentation will outline evidence-based fall prevention strategies implemented by geriatric physicians in the VA and discuss how they might fit into the practice of a broad healthy aging agenda incorporated into health care reform. Included will be descriptions of the VA system, pioneering fall-prevention research conducted in the VA, system-wide fall prevention initiatives and active local programs incorporated into the computerized medical record.

BUILDING THE AGENDA: THE BURDEN AND IMPACT OF FALL INJURIES

J.A. Stevens, *Centers for Disease Control, Atlanta, Georgia*

Older adults want to live independently and age while remaining in their own homes. A third of people aged 65 and older fall each year and fall-related injuries are a major threat to older adults' health, independence and quality of life. This presentation will focus on the burden of falls in the United States. It will address the epidemiology of both fatal and nonfatal fall injuries from a national perspective, including the prevalence of fall injuries and trends in fall injury rates. It will describe the economic impact that these injuries have on society, as well as the effect of falls on older adults' quality of life. It will include a discussion of the personal, behavioral, and environmental factors that increase fall risk, and finish with a brief summary of proven fall prevention strategies.

FALL PREVENTION POLICIES AND PRACTICES IN THE CONTEXT OF THE LOCAL COMMUNITIES WHERE OLDER ADULTS LIVE

J. Pynoos, *USC Andrus Gerontology Center, Los Angeles, California*

In addition to traditional healthy aging and physical activity programs, local communities can develop fall prevention policies and practices that are imbedded in broader housing design and home modification programs as well as neighborhood planning, street and sidewalk maintenance. This session will analyze the types of policies that communities have created that lessen the risk of falls for older persons, the underlying forces for changes, the progress to date, and what needs to be done to raise the issue higher on the agenda.

HEALTHY SGING AND FALL PREVENTION ADVOCACY ON THE NATIONAL AND STATE LEVELS: THE ROLE OF INTEREST GROUPS

B. Beattie, *National Council on Aging, Washington, District of Columbia*

In 2004, the National Council on Aging convened 58 national organizations, professional associations and federal agencies to develop a consensus document of evidence-based strategies to reduce falls and fall-related injuries in older adults. Under what is now termed the Falls Free™ Initiative, legislation was introduced at the national level enfold-ing key strategies from the consensus document. Realizing legislative action required activating a grass roots advocacy network that was greatly facilitated by the National Falls Free™ Coalition and an effective state coalitions' workgroup focused on fall prevention. The State Coalitions on Fall Prevention Workgroup in turn has been serving to promote state advocacy and awareness as well as regulatory and policy initiatives to advance fall prevention in the face of growing numbers of older adults and associated long term care costs. State Coalitions are also serving to facilitate partnership and infrastructure building in local communities, and to take initiatives to the national scale.

RESEARCH, POLICY, AND PRACTICE IMPLICATIONS OF LINKING FALL PREVENTION TO COMMUNITY BASED HEALTHY AGING AND PHYSICAL ACTIVITY PROGRAMS

D. Rose, *Kinesiology, California State University, Fullerton, Fullerton, California*

Physical activity, usually in the form of structured exercise, is a core component of any intervention strategy designed to lower an older adult's risk for falls. Similarly, regular engagement in physical activity is important for preventing or delaying the onset of disability and promoting healthy aging. Considerable research has been conducted to better understand the primary, secondary, and tertiary roles of physical activity as well as the motivators and/or barriers to initiating and maintaining enrollment in physical activity programs. Embedding fall prevention research within the broader context of healthy aging has the potential to stimulate new research questions and more fully address the benefits of physical activity across the continuum of functional levels. At a practical level, linking fall prevention to healthy aging preserves available community resources, expands and shifts the focus of programming while increasing the number of programs addressing both issues. Developing community-based physical activity programming that better addresses the needs of a heterogenous segment of the population and maximizes the available resources will also provide the impetus for new policies and federal mandates related to community-based programming initiatives.

SESSION 1545 (SYMPOSIUM)

EVERYONE'S GOT AGING: USING ART TO EXPLORE COMMUNITY

Chair: D.B. Bradley, *Center for Gerontology, Western Kentucky University, Bowling Green, Kentucky*

Discussant: A. Barusch, *University of Otago, Dunedin, New Zealand*

In this symposium, we take an interdisciplinary look at the role that art can play in capturing the experience of old age and aging. We explore ways of using the arts to engage citizens, discover the challenges and opportunities of aging in a community and develop inclusive strategies for community change. We will show that effective use of the arts in community planning can take many forms and act as a catalyst for meaningful discussion and creative community growth. Our objective is to explore how participatory art can lead to a deeper understanding of "realistic aging" in communities undergoing rapid demographic change. The panelists recreate the creative energy experienced by community members as experienced by diverse age groups. Katherine Daneski will explain how short digital stories stimulate debate. Laura Stephenson will explain how elder generated photographs are an effective catalyst to help the community address its challenges. Dana Bradley will discuss how a photographic exhibition of international elders brought together members of a diverse community. Tina Kruger will describe the use of community photographs in a social marketing campaign and Shoshana Bardach will discuss how images and narratives of individuals aging positively sparked change in expectations about aging. Finally, John Migliaccio will explore how transformative music performance enhances community awareness of aging. Amanda Barusch concludes by discussing the themes of realistic aging reflected in the presentations and opportunities for crafting a deeper understanding of community through creativity.

NARRATIVES OF AGING

K.A. Daneski¹, P. Thimbleby², S. Jones², 1. Swansea University, Swansea, Ceredigion, United Kingdom, 2. Swansea Digital Stories, Swansea, Wales, United Kingdom

Digital stories are short videos that capture the stories which represent their tellers – in this case we present stories of people whose voices are not often heard: those of older people. These stories allow us to enter their world as they reflect on issues such as the freedoms or restrictions that characterised their younger lives, key events that shaped their lives, the realisation of their dreams and ideas about fulfilment. Between individual stories, we hear the views of both older and younger people on themes that appear to resonate with both generations, perhaps challenging stereotypes of intergenerational disharmony. The presentation will stimulate discussion of the value of using this method when researching ageing as it allows participants control of what is said in contrast to the more usual and perhaps intrusive approaches. Attendees of this session may also wish to consider its value in training programs or therapeutic work.

MY COMMUNITY, MY VOICE, STAYING ACTIVE FOR A LIFETIME: OLDER ADULTS SPEAK THROUGH PHOTOGRAPHY

L. Stephenson, *University of Kentucky, Lexington, Kentucky*

A community-based participatory research project in rural Kentucky, featured elder participants' creativity in photographic reflection of their community surroundings. Eight retired adults aged 55 and older were given cameras to visually capture barriers and opportunities to physical activity in their local community. Their photographs revealed that local environmental challenges included broken sidewalks, washed-out trails, and unsafe roadways for walking and biking. Their community pictures identified the local walking track, neighborhood exercise classes, and close proximity to a state park and national forest trail system as beneficial supports for physical activity. Thirty of the 250 pho-

tographs and participant quotes were designed into a booklet authored by the elders entitled *My Community, My Voice: Staying Active for a Lifetime*. The booklet, which showcases the elders' visual interpretation of barriers in striking visual starkness, served as a catalyst to stimulate civic dialogue to raise awareness of community support for physical activity.

ALL THE WORLD IS OUR STAGE: USING IMAGES TO CROSS GEOGRAPHIC BOUNDARIES

D.B. Bradley, *Center for Gerontology, Western Kentucky University, Bowling Green, Kentucky*

This presentation explores the use of a public exhibition of international elder images to create interest and heighten awareness of global aging and diversity. Held in a rural southern region of the United States, this montage of 30 photographs was used as a catalyst to assist aging service planners in their efforts to introduce the issue of globalization and increasing diversity of elders into the local planning process. Historically the region has self identified as primarily "Caucasian," yet the reality has often been much more diverse across both racial and ethnic dimensions. Discussion will include the process for including the exhibition as part of the policy planning process, constituents reactions generated through attendance and an evaluation of the effectiveness of the exhibition.

CREATIVE SOCIAL MARKETING OF MENTAL HEALTH MESSAGES: PROMOTING HEALTHY AGING THROUGH PHOTO-BASED CAMPAIGNS

T. Kruger, F. Zanjani, D. Murray, T. Brown-Hughes, *Graduate Center for Gerontology, University of Kentucky, Lexington, Kentucky*

Maintaining mental health (MH) is an important component of healthy aging. Research aimed at protecting the MH of aging individuals is difficult due to stigma associated with MH issues. Interventions in this area must creatively incorporate ideas relevant to the target audience with the key health messages (e.g., MH problems are not normal aging.) The Mental Healthiness in Aging Initiative did that by creatively integrating photographs of members of the target communities in a social marketing campaign, which included both a television spot and a calendar. To ensure that the target audience would relate to the photos and attend to the key health messages, actual pictures of diverse residents engaged in MH promoting activities (e.g., exercising, visiting, and engaging in hobbies) were selected. Telephone survey results (N=356) indicate that the social marketing efforts resulted in more awareness that MH problems are not a normal part of aging.

THE INFLUENCE OF PHOTOGRAPHS AND NARRATIVES DEPICTING POSITIVE AGING ON FUTURE EXPECTATIONS

S. Bardach, T. Clinkinbeard, C.C. Gayer, *Gerontology, University of Kentucky, Lexington, Kentucky*

Context: Many people are apprehensive about old age and their future years. Purpose: We sought to improve people's expectations for and sense of possibility in old age. Methods: Students and middle-aged volunteers completed a survey including the Expectations Regarding Aging-38 item questionnaire (ERA-38) and a possible selves questionnaire. Following the initial survey, all participants viewed a short presentation that combined images and short narratives of individuals aging positively. After the presentation, participants completed an identical survey. Results: Responses to the ERA-38 demonstrated an improvement in expectations about aging, with a larger improvement among the younger respondents. The possible selves questionnaire demonstrated a decrease in total number of possible selves identified, but the changes varied by domain and age group. Implications: This study demonstrated the potential for media presenting positive aging to have an impact upon expectations for the future. Implications for older adults' decision making and health choices are discussed.

ISSUES IN ASSISTED LIVING

RESIDENT AND STAFF PERSPECTIVES ON QUALITY OF LIFE IN INDEPENDENT AND ASSISTED LIVING SETTINGS

E. Schuster, *Eastern Michigan University, Ypsilanti, Michigan*

The Association of Homes and Services for the Aging (AAHSA) developed a philosophy of quality known as Quality First. Through Quality First, AAHSA members "work in partnership with all stakeholders—government, consumers and the people we serve and their families—to create quality of care and Quality of Life in aging services." This study explored resident, staff, and administrator perspectives on quality of life issues at two continuum of care facilities located in rural southeastern Michigan. One site was small in size and strove to create a "home-like" setting. The other site was much larger and adhered closely to regulatory guidelines and annual survey results to guide future planning and development. Six focus group sessions sought to determine the participants' perspectives on quality of life issues. Findings reflecting staff and administrators' perspectives indicate that institutional philosophy, size, and mission, directly impact the way in which quality of life is defined and practiced. Internal cultural transformations were based on respect for the caregivers, team building and management, continuous quality improvement, and resident centered care. Another important finding indicated that both staff and residents were concerned about staff response to situations where residents are no longer able to function at full capacity in the Independent Living environment due to mental and physical decline. Residents felt that the lack of effective responsiveness to the consequences of an aging-in-place approach directly negatively impacted their quality of life. The paper will provide a discussion on these and other findings regarding communication, customer service, and programming issues.

WORKER-ON-WORKER RACISM IN ASSISTED LIVING

M. Lepore¹, M. Perkins³, S. Miller¹, M. Ball², 1. *Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island*, 2. *Gerontology Institute, Georgia State University, Atlanta, Georgia*, 3. *Rollins School of Public Health, Emory University, Atlanta, Georgia*

Purpose: Racial diversity exists among direct care workers (DCWs) in long term care (LTC). Nationally, White DCWs are the racial minority. LTC worker-on-worker racism has been documented, but little research examines how organizational factors influence such racism. Furthermore, no known studies focus on coworker racism in assisted living (AL). We fill these gaps. Design and Methods: Forty-five AL facilities in Georgia were studied. Organizational data were collected, prevalent race of DCWs and residents determined, and each facility categorized as racially matched or mismatched according to the racial difference between DCWs and residents. Interviews were performed with DCWs, and questions asked about experiences with coworker racism. Multivariate logistic regression tested the associations between DCW race and a facility's racial match or mismatch on the experience of coworker racism. Results: Overall, minority and White DCWs experience racism from coworkers at similar rates. These rates vary by worker-resident racial match: In facilities where the prevalent race of DCWs and residents is matched, minority DCWs are almost five times more likely than White DCWs to experience coworker racism, but in facilities where DCWs and residents are racially mismatched, minority DCWs are almost seventy percent less likely than White DCWs to experience coworker racism. Implications: Organizational racial diversity among LTC staff and residents is an important consideration when assessing the potential for worker-on-worker racism. Anticipating coworker racism based on broader organizational racial dynamics might allow providers to prevent such racism in their facilities. Methodological transferability to different settings is discussed.

STAFF TURNOVER IN ASSISTED LIVING: WHO LEAVES AND WHY?

E. Sikorska-Simmons, H.L. Remh, *Sociology, University of Central Florida, Orlando, Florida*

High staff turnover has been recognized as a major problem in assisted living (AL). Little is known, however, about the reasons for staff turnover and characteristics of "stayers" and "leavers." The purpose of this study was to examine three types of staff turnover (i.e., voluntary, involuntary, and job abandonment), compare how "stayers" differed from "leavers" (i.e., age, sex, race, foreign-born status, job type, and employment status), and identify those characteristics that best discriminated among different types of "leavers." Methods. The sample consisted of 950 staff in 22 AL facilities. All staff members who were hired and paid by the facility during a 12-month period were included. Turnover data were collected (at the individual level) in interviews with administrators and through the review of facility records. Descriptive statistics and logistic regression were used to compare "stayers" and "leavers." Results. Of the 950 staff members, 560 (58%) were "stayers" and 390 (41%) were "leavers." Compared to "stayers," "leavers" tended to be younger and were less likely to be foreign born. Of those who left, 44% were voluntary leavers, 27% were involuntary leavers, and 29% abandoned their jobs. Compared to voluntary leavers, those who abandoned their jobs were younger, less likely to be white, foreign-born, and more likely to occupy paraprofessional jobs and work full-time. Implications. These findings suggest that "leavers" are not a homogenous group. In particular, those who abandon their jobs are different from voluntary leavers. Efforts to reduce turnover might be more effective if they target different types of turnover.

ASSESSING FACTORS ASSOCIATED WITH OUTDOOR USAGE AT ASSISTED LIVING FACILITIES

S. Rodiek, *Architecture, Texas A&M University, College Station, Texas*

Contact with the outdoors has been associated with multiple benefits to health and well-being in older adults, yet outdoor space in residential care settings is commonly reported as underutilized. The purpose of this study was to determine whether environmental and programmatic features were associated with levels of outdoor usage, walking behavior, and frequency and duration of family visits. At 68 randomly selected assisted living facilities in three climatically diverse metro-regions (Houston, Chicago, Seattle), a 63-item environmental assessment scale was used to evaluate a wide variety of outdoor areas, while residents and staff were surveyed (N=1599). Resident ratings of specific environmental qualities agreed with researchers' evaluations on four of the five principles tested. Outdoor usage was significantly associated with levels of walking and physical activity, and residents in all regions reported a strong preference for walking outdoors. Outdoor areas at the front of buildings were reported as most often used by residents, and having developed front areas was found to be positively associated with outdoor usage. Other factors strongly associated with levels of outdoor usage were horticultural therapy programs, paving conditions, and the force required to open doors. Frequency and duration of visits by family and friends correlated significantly with visitors' usage of outdoor areas. Findings suggest that outdoor usage, walking, and family visitation may be increased by specific environmental features and activity programs. Checklists and educational materials are now available to help assisted living and long term care administrators assess and identify best practices.

SESSION 1555 (SYMPOSIUM)

PROMOTING HEALTHY AGING: BRINGING HOME LESSONS LEARNED FROM ABROAD

Chair: *M.B. Neal, Institute on Aging, Portland State University, Portland, Oregon*

Discussant: *M. Pelaez, Health Foundation of South Florida, Miami, Florida*

Less developed countries are experiencing rapid population aging and face the problem of meeting the needs of impoverished older persons without the safety nets in place in developed countries such as the United States (U.S.). According to the 2008 United Nations Revision Population Database, those aged 60+ will comprise almost 9% of the population in 2010 in countries designated as less developed, in contrast to about 18% in the U.S. By 2050, these proportions are expected to be 20% and 33%, respectively. This symposium will introduce a Global Aging Initiative funded in 2008 at Portland State University (PSU) and its partnership with the Jessie F. Richardson Foundation (JFR) to develop service learning and community development models for identifying and addressing some of the needs of vulnerable older adults. It will discuss how the models evolved, the lessons learned, and how those efforts may be useful in addressing needs of low-income, chronically underserved elders in the U.S. The first presentation will describe the models and their components, key elements of which are partnership creation and a multi-disciplinary integrated approach. The second will focus on local factors that must be considered in the application of these models to the local context and obstacles encountered. The third will present findings from one of the program's activities – a Nicaraguan elders' needs assessment. The discussant will offer suggestions for adapting the models to the American context and for guiding service learning and community development efforts in rural areas and communities with high levels of poverty.

LOCAL PARTNERSHIPS: A KEY ELEMENT FOR INDIGENOUS CAPACITY BUILDING TOWARD HEALTHY AGING

M. Lopez Norori, Universidad Nacional Autónoma de Nicaragua, Managua, Nicaragua

In less developed countries, partnerships often rely on a model of aid givers and receivers. Often, the recipients are viewed primarily as instruments of aid distribution; sometimes they are asked to identify their needs. This approach can create a culture of dependency and a negative view of aid recipients. This presentation describes a partnership model based on reciprocity among multiple groups. Partnerships based on common interest are crucial for creating leverage that increases the capacity of local communities to address the needs of older persons in less developed countries. Local representatives established a planning and development council. Community-based participatory research methods were used to inventory needs, resources, priorities and intervention strategies. The council had input into the design and implementation of short- and longer-term interventions. This presentation discusses the process and some of the results, including training, public service activities, awareness creation and micro-enterprise activity.

NEW APPROACHES TO INTERNATIONAL AID: SUSTAINABLE STRATEGIES FOR LESS DEVELOPED COUNTRIES

K. Wilson, Jessie F. Richardson Foundation, Clackamas, Oregon

Three approaches to support older individuals in need living in less developed countries are presented: direct aid, cooperative activity and capacity building. Each focuses on something unique: immediate response to basic needs, interventions for ongoing needs, and building sustainable indigenous capacity. Each is targeted to yield short-, medium- and longer-term benefits. Historically, international aid has been consistent with the first two approaches. Of growing concern, however, is

that these approaches require repeated interventions and may serve to delay more permanent solutions. More recently, more sustainable solutions have gained attention. Sustainable interventions are responses that can be maintained and expanded with fewer, smaller and shorter infusions of external resources. This approach involves indigenous capacity building and is viewed as having potential for longer-term impact in improving the lives of older persons who are living in extreme poverty. Examples of each approach are given as well as an analysis of their outcomes.

USING SERVICE LEARNING TO IDENTIFY AND ADDRESS ELDERS' NEEDS IN NICARAGUA

M.B. Neal, Institute on Aging, Portland State University, Portland, Oregon

Approaches taken as part of a multi-year service learning program to gain an understanding of conditions, resources, and needs of elders in three Nicaraguan communities are presented. They included personal interviews with community elders using a survey instrument and information gathering through community meetings. The findings were then used to develop training and materials concerning basic health problems associated with aging. Strategies that can be taken when resources are scarce to maximize healthy aging were also developed and shared with health professionals and community members, including school children. The average age of participants in the survey was 74.6; 40% were illiterate, 54% rated their overall health as not very good or bad, and 84% reported not having enough money for food and health care. Similar to the U.S., being poor and illiterate were associated with poor self-perceived health, lack of resources, and transportation barriers to accessing to health care services.

SESSION 1560 (SYMPOSIUM)

RECENT RESEARCH ON PRIVATE LONG-TERM CARE INSURANCE: FINDINGS AND POLICY IMPLICATIONS

Chair: *P. Doty, OS/ASPE/DALTCP, U.S.DHHS, Washington, District of Columbia*

Discussant: *J. Cutler, Office of Personnel Management, Washington, District of Columbia*

Because of the existing eligibility and coverage restrictions on public financing of long-term care services, private long-term care insurance is currently the only way for most Americans to plan ahead to ensure that if they become disabled, they will be able to afford paid services in the settings (home, assisted living, or nursing home) that they prefer. This session will provide an overview of recent research on private long-term care insurance sponsored by the Office of the Assistant Secretary for Planning and Evaluation at the U.S. DHHS. The research findings to be presented will include: (1) results of a 28 month follow-up of a representative sample of private LTCI claimants from ten companies that account for 80 percent of market share, (2) a study of the effects of alternative approaches to inflation protection on lapse rates by policyholders, and (3) data on states that have, under the legislative authority of the 2005 DRA, have established Medicaid/private long-term care insurance partnerships and the impact on insurance sales in partnership states. The session will conclude with a discussion of public policy implications and brief mention of other research still underway.

DECISIONS AND CHOICES AMONG AN ADMISSIONS COHORT OF PRIVATELY INSURED DISABLED ELDERS

J.S. Miller, M. Cohen, LifePlans, Inc., Waltham, Massachusetts

The number of individuals requiring assistance with personal care activities will rise dramatically in the years ahead. Even in the presence of reported declines in age-specific disability rates, the number of individuals age 65 and over who will need assistance with everyday activities will grow from about 5 million (today) to 7 million (by 2020) (The Lewin Group, 2002). While currently available data helps to uncover the factors related to observing someone in a particular state of disability

or service modality, it does not facilitate an understanding of the factors behind the decision to begin using a particular service. Attendees will learn about the demographic, health and attitudinal profile of individuals with private long-term care insurance policies at the time that they begin using paid services, as well as the factors involved in the decision about how and why to use paid services in particular care settings.

FINDINGS FROM A STUDY OF LONG-TERM CARE INSURANCE CLAIM DECISIONS

M. Cohen, J.S. Miller, *LifePlans, Inc., Waltham, Massachusetts*

Recent publicity in the New York Times has raised the issue of the long-term care insurance industry engaging in inappropriate denials of long-term care claims. The article raises a broad question about industry practice: is the long-term care insurance industry paying benefits appropriately? This broad question can really only be answered by focusing on two sub-questions: (1) Is the denial of benefits to policyholders making claims on their policy appropriate, and (2) Is the payment of benefits to policyholders making claims on their policy appropriate? Attendees of this session will learn about the findings from a study of claims across the long-term care insurance industry that were both denied and accepted based upon clinical criteria. These claims were audited and the documentation reviewed by clinical staff to determine the "appropriateness" of the initial decision.

SESSION 1565 (PAPER)

THE ROLE OF GENDER

THE RELATIONSHIP BETWEEN WOMEN'S WORK HISTORIES & INCOMES IN LATER LIFE IN THE UK, US & WEST GERMANY

M. Evandrou¹, J.C. Falkingham¹, T. Sefton², A. Vlachantoni¹, *1. centre for Research on Ageing, University of Southampton, Southampton, United Kingdom, 2. London School of Economics, London, United Kingdom*

Women typically fare worse economically than men in retirement. This reflects their roles within the family and the labour market, and consequently their ability to build up an adequate income in retirement. Different welfare regimes may act to ameliorate or compound the impact of interrupted work histories on income in later life. This paper investigates the relationship between older women's work histories and their personal incomes in later life in UK, US and Germany, using data from large scale longitudinal surveys (BHPS, PSID & GSOEP). Comparing three countries with different welfare regimes provides insight into the interaction between the life course, pension system and women's incomes in later life. The analysis shows that the association between work histories and women's income in later life is strongest in Germany and weakest in the UK. In the UK, work history was found to have a positive relationship with income in later life for only those women with predominantly full-time employment histories, whereas in Germany and to a lesser extent in the US, part-time and irregular full-time employment also had a significant and positive association with later life incomes. The results provide evidence of a pensions poverty trap in the UK, whereby women with partial employment histories (eg up to 15 years in full-time employment, and up to 25 years or more in any employment), do not appear to benefit in pension terms from their participation in the labour market. The implications of the findings are discussed within the context of pensions legislation.

THE FAMILY CAREGIVING BURDEN: THE ROLE OF GENDER AND CARE RECEIVER/CARE PROVIDER RELATIONS

V. Lou, *Social Work & Social Administration, The University of Hong Kong, Hong Kong, Hong Kong, China*

Aims: This study aims to examine the gendered role, and care receiver/care provider relations on the family caregiving burden in a Chinese context in Hong Kong. **Method:** The survey method was adopted using multi-stage random sampling. A standardized questionnaire was administered via face-to-face interview with 435 caregivers who are caring for frail elders in Hong Kong. Results showed that among the 435 respondents, 23% were spouses and 64% were children. Results: The burden of family caregiving was found to be higher among spouse caregivers than child caregivers ($p < .01$); higher among female caregivers compared to male caregivers ($p < .01$). Such differences were found on the overall burden and the five aspects of burden (i.e. Time-dependent, Developmental, Physical, Social and Emotional), as measured by the Chinese version of the Caregiver Burden Inventory. Consistent with the literature, the highest burden was reported in the area of time-dependent, followed up developmental and physical burden; while the lowest burden was in the area of emotional. Gender and caregiver/care receiver relations seemed to have an independent contribution to the caregiving burden without significant interaction effect with gender of the caregivers. **Conclusion:** The findings of the study revealed that gender and care receiver/care provider relations, seemed to work independently. Hence, not only the observations on the gender of the family caregiver, but also on the phenomena of 'nuclear family caregiving,' meaning the different and higher burden experienced by a spouse versus a child caregiver, are worthy of notice in service planning and policy development.

THE RISING SIGNIFICANCE OF MARITAL STATUS: TRENDS IN POVERTY AMONG THE ELDERLY, 1968-2007

P. Herd, *University of Wisconsin-Madison, Madison, Wisconsin*

Since 1959, poverty among the elderly has dropped by nearly 25 percentage points, from 35 percent to 9.5 percent. Whereas elderly Americans used to be the age group most likely to experience poverty, they now have lower poverty rates than either children or working age adults. Despite these positive trends, however, there are wide economic differences among older Americans. Women are twice as likely to be poor compared to older men. African Americans are nearly three times as likely to be poor as are whites. But have these differences changed over time? Are poverty gaps among the elderly closing or widening by sex, race, marital status and educational attainment? In short, have differences in poverty between groups of elderly Americans shrunk, stayed the same, or expanded over the past 40 years? Using the Current Population Survey data from 1968-2007, I explore how gaps in poverty among those aged 65 and over, by sex, race, educational attainment, and marital status, have changed over time. In sum, I find that while differences in poverty have shrunk by race and educational attainment, gender gaps have remained relatively stagnant, and gaps by marital status have grown.

OLDER WOMEN'S MORAL REASONING: AN ANALYSIS BASED ON CAROL GILLIGAN'S THEORETICAL FRAMEWORK

E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

This study examined moral reasoning among older women, a group that has received little attention in moral development and reasoning research and theory, based on the female moral development model developed by psychologist Carol Gilligan. This model was developed as a result of the finding that females are deficient in comparison with males when tested within the framework of Lawrence Kohlberg's moral development theory (Gilligan, 1982). Gilligan's alternate theoretical understanding of female moral development was developed through

research with subjects diverse in gender, ethnicity, age (6 through 60), and socioeconomic status. This research emphasizes real-life decision making, for instance reasoning around the decision of whether or not to have an abortion (Gilligan; Gilligan & Attanucci, 1988). One limitation of Gilligan's model, however, has been the lack of research on older adult (i.e., over age 60) subjects. This study addressed this gap by assessing the utility of Gilligan's model among 88 African American, Latina and Caucasian women age 60 and over from varying socioeconomic backgrounds who participated in eight focus groups that examined ethical dilemmas within adult protective services (APS) related to mandatory reporting, involuntary protective services, and criminalization of elder maltreatment (Dakin & Pearlmutter, 2009). The participants' reasoning in responding to the dilemmas reflected underlying decision-making processes based in an ethic of care and responsibility and recognition of the limitations of autonomy. This type of reasoning is clearly consistent with Gilligan's description of the care perspective, an orientation emphasized by females in responding to ethical dilemmas (Gilligan & Attanucci).

ELDER ABUSE AND WOMEN: A HUMAN RIGHTS PERSPECTIVE TO INTERNATIONAL SOCIAL WORK PRACTICE

D. Mukherjee, *Social Work, Southern Illinois University Carbondale, Carbondale, Illinois*

Elder abuse is worthy of interest for epidemiologist, clinicians, social workers, and health-service workers. The incidences of elder abuse across cultures and nationalities have a gender bias; elderly women are far more likely to find themselves at the receiving end of abuse than their male counterparts. This is further accentuated by the disproportionate rise of females within the elderly population. Women outnumber men by 2 to 1 at age 80 in developing countries. A majority of these women are widows, many with mental health conditions, with limited economic resources and social support. The break down of the multigenerational co-resident families has further eroded the kinship support systems for the elderly women, who live longer and outnumber men in the old-old category (75 and above). The human rights perspective as mandated by the University Declaration of Human Rights has been used to identify social work practice models for elder abuse victims (Reichert, 2003). In 2002, the Madrid International Congress had recognized elder abuse as human rights violation and has urged international multilateral organizations to form specific task force to address the problem. The paper draws quantitative data from the Help Age International, an international non-governmental organization working with the elderly in India, and the United Nations data on developing countries. The paper ends with discussing various practice models on elder abuse informed by human rights perspective.

SESSION 1570 (SYMPOSIUM)

THE SOCIAL WORK WORKFORCE: LEGISLATIVE AND POLICY INITIATIVES TO CARE FOR AN AGING AMERICA

Chair: N. Hooyman, *Council on Social Work Education Gero-Ed Center, Alexandria, Virginia, University of Washington School of Social Work, Seattle, Washington*

Discussant: R. Golden, *Rush University Medical Center, Chicago, Illinois*

The 2008 Institute of Medicine (IOM) report called for immediate investments in preparing the health care system to care for older Americans and their families (IOM, 2008). The social work workforce needs to increase recruitment, retention, and training of gerontologically competent social workers. The proposed symposium will consist of a cross-section of voices from the social work field including education, service provision, informal caregiving, and public policy. The symposium will highlight the intersections between informal and formal care providers, and social work's role in caring for older adults and their fam-

ilies. Federal legislation and regulatory changes affecting social work training and models of care for older adults will be examined. The panel will also describe social work's role in the new Eldercare Workforce Alliance, which aims to implement IOM recommendations for recruitment, retention, training, and compensation issues across the direct care and professional health care workforce, including social work. The current economic situation, the insufficient number of formal and informal care providers, and the overall demographic imperative present a challenge and an opportunity. The social work field needs to be politically engaged during this time to ensure that more gerontological social workers are prepared and retained, are competent in working effectively with family caregivers and direct care staff, and are providing leadership in developing new models of care. Institute of Medicine. (2008). *Retooling for an Aging America: Building the Health Care Workforce*. Committee on the Future Health Care Workforce for Older Americans, Washington, DC: The National Academies Press.

HEALTH AND SOCIAL SERVICE WORKFORCE POLICY INITIATIVES TO SUPPORT OLDER ADULTS AND THEIR FAMILIES

L. Feinberg, *National Partnership for Women & Families, Washington, District of Columbia*

American families are concerned about quality of care for their older relatives and friends. According to the Institute of Medicine, severe workforce shortages in the care of older adults results in too few health and social service providers equipped in skills or numbers to provide older adults and their families with the best possible care. There is also a need for professionals to adopt a family-centered care approach as well as patient-centered, so that family caregivers are supported throughout policies and programs. Current federal legislation and advocacy initiatives addressing the health care workforce, including informal family caregivers and aging issues, will be discussed.

CRISIS IN ELDERCARE: GENDER AND RACIAL INEQUITIES

N.R. Hooyman, *School of Social Work, University of Washington, Seattle, Washington*

The crisis in care for older adults and their families cross-cuts three levels of caregivers: professional health care providers, with the focus here on gerontological social workers, underpaid direct care workers, and unpaid family caregivers. Dynamics shared across these formal and informal caregivers intensify the eldercare crisis in four ways: 1) The intersections with race/immigration, gender, social class, and sexual orientation underlie caregiving's low status; 2) Poorly paid or unpaid caregiving intensifies gender and racial inequities in old age; 3) The impact of changes in healthcare and the economy intensifies pressures on caregivers, especially women of color; and 4) The challenges of recruiting and retaining gerontological social workers and direct care workers. This presentation suggests policy and programmatic changes to support the legitimate but undervalued work by formal and informal sectors and makes the case for policy and advocacy collaboration between formal care providers and informal caregivers, congruous with the Eldercare Workforce Alliance's approach to geriatric workforce needs

EXPLORING NEW MODELS OF CARE FOR OLDER ADULTS

P.J. Volland, *The New York Academy of Medicine, New York, New York*

Several key facts support the need for new models of care for meeting the needs of older adults and their families: 1) a desire to stay independent and in the community as long as possible; 2) the presence of multiple chronic conditions that restrict functional ability and need coordinated management; 3) the fact that over 60% of all care in the community is provided by unpaid informal caregivers; 4) the fact that the number of professionals trained to work with older adults is not increasing - especially in medicine and nursing; and 5) the need to coordinate both health and social services to fully meet the needs of this popula-

tion. For these reasons, the IOM Report strongly recommends developing and disseminating new models of care; some promising models, the policy activities necessary to support them and their implications for social work will be examined.

SESSION 1575 (SYMPOSIUM)

CAPITOL HILL UPDATE: HOW BUDGET AND POLICY DECISIONS ARE SHAPING THE FUTURE OF MEDICAL RESEARCH

Chair: *A. Gafni, Biophysics, University of Michigan, Ann Arbor, Michigan*

Discussant: *G. O'Neill, The Gerontological Society of America, Washington, District of Columbia*

Reinvesting in medical research was one of President Barack Obama's most prominent campaign themes and an early focus of his new administration. This session will reflect on how much progress the President has made in fulfilling his campaign promise to significantly increase federal funding for research and explain the role Congress plays in making decisions about spending priorities. It will also explore emerging policy issues that are shaping the future of medical research, including a new report from the Institute of Medicine (IOM) concluding that the HIPAA Privacy Rule does not protect privacy as well as it should and is currently impeding important health research. The report recommends an entirely new approach to protecting privacy in health research and also suggests a series of changes to improve the rule and the guidance that the Department of Health & Human Services provides on how to comply with the existing regulations. Participants in this session will gain an understanding of how they can use their expertise as researchers to advocate for and influence Congress and policymakers as well as learn about tools and resources that are available to help individual citizens monitor key legislative and policy developments affecting medical research.

SESSION 1580 (SYMPOSIUM)

ADAPTING AND TRANSLATING EVIDENCE-BASED CAREGIVING INTERVENTIONS: CONCEPTUAL ISSUES, PRACTICAL CHALLENGES, AND FUTURE CONSIDERATIONS

Chair: *J.E. Gaugler, School of Nursing, University of Minnesota, Minneapolis, Minnesota*

Discussant: *S.H. Zarit, The Pennsylvania State University, University Park, Pennsylvania*

Multi-component psychosocial interventions appear effective in enhancing caregivers' psychosocial outcomes and delaying institutionalization of cognitively impaired older adults. The current challenge facing researchers and practitioners is to devise viable strategies to translate and/or adapt these intervention models to meet the needs of diverse caregivers. The objective of this symposium is to highlight these ongoing efforts. The initial speaker, Dr. Louis Burgio, will provide an overview of conceptual and practical issues related to the translation of caregiving interventions. Dr. Burgio is at the vanguard of this issue based on his ongoing research to apply translational science to the study of caregiving interventions. The 2nd speaker, Dr. Mary Mittelman, is the principal investigator of the pioneering New York University Caregiver Intervention (NYUCI). Dr. Mittelman will summarize some of the issues and challenges that have arisen based on various stakeholders' efforts to translate the NYUCI. The 3rd speaker, Donna Walberg, is project director of an Administration on Aging sponsored effort to translate the NYUCI for spouse caregivers across the state of Minnesota; an overview of the process of implementation will be emphasized. Dr. Joseph Gaugler will then summarize the ongoing challenges in modifying the parent NYUCI for replication in a different geographical context and target sample. The symposium will conclude with Dr. Steven H. Zarit as

discussant. As an internationally-renowned researcher of dementia caregiving, Dr. Zarit will offer frank insights into the challenges posed by these presentations, in addition to providing key strategies for researchers and practitioners to consider when translating caregiver interventions.

IS THERE A SCIENCE OF TRANSLATION?

L.D. Burgio, School of Social Work, University of Michigan, Ann Arbor, Michigan

In 2002, Dr. Elias Zerhouni, then Director of NIH, referred to translation as an emerging science, and called for a concerted effort to develop new procedures, methods, and designs to develop translation into a mature science. Seven years after Zerhouni's call for action, there is still no consensus on strategies for translating interventions found efficacious in randomized clinical trials (RCT), for feasible use in the community settings. There are several reasons for this slow rate of progress. Two major reasons are: 1) social-behavioral RCTs are almost always tests of treatment packages using multiple treatment components. To develop a scientific process of translating interventions, it is extremely important to know which Treatment components are critical and which are not. Unfortunately, not a single caregiver intervention has used a component analysis design to identify critical treatment components; 2) an effectiveness study would provide valuable information to investigators prior to community implementation. Again, however, no caregiver intervention package has been run as an effectiveness trial. To demonstrate these points, the presenter will describe a study where community-based participatory research methods were used to translate the REACH II RCT for feasible use in the community. After attending this event, participants will gain knowledge regarding the challenges facing translation efforts, and they will be able to define one strategy for translating interventions.

THE NYU CAREGIVER INTERVENTION, THE ORIGINAL STUDY AND ISSUES IN EARLY TRANSLATIONS IN DIVERSE COMMUNITY SETTINGS

M.S. Mittelman, C. Epstein, Psychiatry, NYU Langone School of Medicine, New York, New York

The NYU Caregiver Intervention (NYUCI) has demonstrated efficacy for spouse-caregivers in a randomized controlled trial in a major metropolitan area, and is now being replicated with adult-child caregivers and translated in communities in several geographic areas and socio-economic (SES) groups. The original intervention had significant effects on social support, symptoms of depression, reactions to patient behavior and self-reported health of spouse-caregivers, which resulted in major delays in nursing home placement of patients. We will describe the design and results of the original intervention and challenges to translation in community pilot studies in rural Vermont and New York City (Medicaid Managed Care participants and Latino caregivers). Challenges include dispersed families in Vermont and requirements for case-management services among participants in low SES families in New York. Education and ongoing communication between the researchers and social service and health care providers have overcome many barriers and increased utilization of the NYUCI.

THE MINNESOTA TRANSLATION OF THE NEW YORK UNIVERSITY CAREGIVER INTERVENTION

D. Walberg, Minnesota Board on Aging, Minnesota Department of Human Services, St Paul, Minnesota

Minnesota was selected by the US Administration on Aging as AoA's first translation site for the groundbreaking New York University Caregiver Intervention (NYUCI). This project, known in Minnesota as Family Memory Care, is attempting to translate the NYUCI to rural Minnesota. It is the goal of Family Memory Care to embed the NYUCI into existing caregiver coach practice as a component in the continuum of caregiver supports. This session will outline the steps taken from planning through implementation. This session will also highlight the range

of challenges and strategies devised to address translation of the NYUCI within the RE AIM framework. The RE AIM framework is a guide and method of documenting the process and impact of the translation in addition to key original outcome measures. Participants will be able to identify the key issues of translating a multi component research intervention to a successful community based intervention while maintaining results similar to the original study.

ADAPTING THE NEW YORK UNIVERSITY CAREGIVER INTERVENTION FOR ADULT CHILD CAREGIVERS: KEY CHALLENGES AND ISSUES

J. Gaugler, K. Kellis, M. Reese, *School of Nursing, University of Minnesota, Minneapolis, Minnesota*

The New York University Caregiver Intervention (NYUCI) has yielded consistent success in reducing caregiver psychosocial distress and delaying nursing home admission for cognitively impaired care recipients. Among the NYUCI's strengths are its multi-component treatment strategy, randomized controlled design, and long-term follow-up. However, findings are limited to one experimental site and spouses of Alzheimer's patients. This presentation will summarize an ongoing research effort at the University of Minnesota that is attempting to expand the scope of the NYUCI by focusing on adult child caregivers (called the NYUCI-Adult Child protocol). This presentation will summarize the overall design of the NYUCI-Adult Child project and highlight how this intervention model has deviated or aligned with the original NYUCI design. Attendees will gain an appreciation of the benefits and challenges of adapting an evidence-based caregiver intervention for a target sample that varies from the original evaluation in terms of geography and clinical need.

SESSION 1585 (SYMPOSIUM)

AGING AND THE LIFESPAN: LONGITUDINAL STUDIES IN THE 21ST CENTURY – THE NEW LOOK

Chair: N. Ram, *Pennsylvania State University, University Park, Pennsylvania, Max Planck Institute for Human Development, Berlin, Germany*

Discussant: F. Blanchard-Fields, *Psychology & Aging, Washington, District of Columbia*

The study of aging is moving from more static representations of phenomena to more dynamic ones. The need for articulating and testing such process-oriented perspectives on human functioning and development has demanded the revision of existing or the proposal of new theoretical approaches, methodologies, and types of longitudinal data collections. In this symposium, we explore what the "post-modern" longitudinal study looks like, and illustrate how such designs can be used to capture the dynamic and complex changes in behavior that occur with time and age. N. Ram introduces concepts of intraindividual variability and change and considers the substantive and methodological possibilities they offer for studying dynamic aspects of human function. S. MacDonald highlights new methods for examining the aging of the neuro/biological sub-systems that support everyday function, second-by-second. F. Schmiedek illustrates how capturing and modeling hour-to-hour and day-to-day changes in function can provide new clues about aging processes. M. Sliwinski discusses the contemporary advances in ambulatory data collection and longitudinal design that allow for expanded examination of how momentary stress translates into health, function, well-being, and ultimately disease and decrement. F. Blanchard-Fields integrates the four papers and highlights from the Editor's perspective the trends toward intensive longitudinal data collection and process-oriented inquiry she sees emerging in the literature across a broad array of substantive areas. Together, we attempt to provide a broad overview of the leading edge in the study of aging as a dynamic process unfolding over days and decades.

INTRAINDIVIDUAL VARIABILITY AND CHANGE: TOOLS FOR EXAMINING THE AGING OF DYNAMIC CHARACTERISTICS AND PROCESSES

N. Ram, D. Gerstorf, *Pennsylvania State University, University Park, Pennsylvania*

This paper provides an introduction to and descriptive frame for the combined study of intraindividual variability and aging. At the conceptual level, we highlight that the study of intraindividual variability provides access to dynamic characteristics – construct level descriptions of individuals' capacities for change (e.g., plasticity), and dynamic processes – the systematic changes individuals' undergo to adjust to endogenous and exogenous challenges (e.g., regulation). At the methodological level, we review how quantifications of gross intraindividual variability (e.g., iSD) and models of patterned intraindividual variability (e.g., time series) are being used to measure and describe dynamic characteristic and processes. Finally, at the research design level, we point to the benefits of measurement burst study designs, wherein data are obtained across multiple time scales, for the study of aging.

NEURAL UNDERPINNINGS OF WITHIN-PERSON VARIABILITY IN COGNITIVE FUNCTIONING AND AGING

S.W. MacDonald¹, S. Li², L. Bäckman³, *1. Psychology, University of Victoria, Victoria, British Columbia, Canada, 2. Max Planck Institute for Human Development, Berlin, Germany, 3. Karolinska Institutet, Stockholm, Sweden*

Intraindividual variability (IIV) reflects systematic but transient within-person changes in performance, such as trial-by-trial fluctuations in response latency. Increased IIV in cognition is associated with aging-related processes including cognitive decline, physiological deficits, and neurodegenerative pathology. Despite advances in the study of IIV, there has been little examination of underlying neural correlates and virtually no synthesis of extant findings. The present talk summarizes accumulating empirical evidence that links age-related increases in IIV to neural correlates at the anatomical (gray- and white-matter integrity), functional (BOLD activation), neuromodulatory (dopamine), and genetic (COMT) levels. Alterations in dopamine (DA), for example, are of particular interest as populations that exhibit neuromodulatory DA changes also exhibit increased behavioral IIV (the elderly, ADHD children, schizophrenics, Parkinson patients); recent findings clearly link IIV to DA D2 receptor binding. We conclude by highlighting important challenges and outstanding research issues that remain to be answered in the study of IIV.

INTRAINDIVIDUAL VARIABILITY WITHIN AND ACROSS DAYS

F. Schmiedek^{1,2}, M. Lövdén^{3,1}, M. Riediger¹, G. Wagner^{4,1}, U. Lindenberger¹, *1. Max Planck Institute for Human Development, Berlin, Germany, 2. Humboldt-Universität, Berlin, Germany, 3. Lund University, Lund, Sweden, 4. German Institute for Economic Research, Berlin, Germany*

When investigating age differences in variability of cognitive performance from day to day, it is important to also take variability at faster time scales into account, because age differences in such lower-level variability can influence results at the daily level. Here, data from two studies with repeated measurements across many occasions are reported: (a) the COGITO Study, in which 101 younger (20-31 years) and 103 older (65-80 years) adults worked on a battery of 12 cognitive tasks and self-report measures for 100 daily occasions, and (b) a study with 378 participants (14-86 years) who completed 54 assessments of performance on a working memory task as well as self-report measures via cell phones in their daily lives. Methodological approaches to take into account variability at different time scales within a multilevel modeling framework as well as approaches based on formal models from cognitive psychology are presented and discussed.

MEASUREMENT BURST DESIGNS IN DEVELOPMENTAL HEALTH RESEARCH

M. Sliwinski, *Pennsylvania State University, University Park, Pennsylvania*

Questions about variability and change in human behavior lie at the heart of the developmental sciences. This presentation examines the use of the measurement-burst design as an approach to study within-person processes that transpire over very different temporal intervals. Consisting of repeated bursts of intensive (i.e., daily or momentary) assessments, the burst design can augment the type of information obtained from conventional daily diary and prospective longitudinal designs. Discussion will examine how the measurement-burst approach can improve detection of long-term intraindividual change, and how it can be used to link intraindividual variability and change observed over short-term temporal periods (e.g., daily stress processes) with long-term developmental and health outcomes.

SESSION 1590 (POSTER)

ATTITUDES & VALUES

THE PERCEIVED AGEISM AND DISCRIMINATION OF THE ELDERS AFTER HIP FRACTURE

Y. Huang^{3,1}, S. Tang⁴, L. Chen^{3,2}, L. Tsai¹, H. Cheng¹, I. Yu^{3,1}, Y. Li¹, Y.L. Shyu³, 1. *Chang Gung Institute of Technology, Taoyuan, Taiwan*, 2. *Yuanpei University, Hsin-Chu, Taiwan*, 3. *Chang Gung University, Taoyuan, Taiwan*, 4. *Ming Chuan University, Taoyuan, Taiwan*

Hip fracture is one of the causes that tremendously affect daily activities and walking abilities of elders. After hip fracture, patients often reduce their activity function for a period of recovery time. Previous researches have proved that good family and social support would improve the physical and psychological outcomes of the elders with hip fracture. The other studies demonstrated that ageism or disable discrimination would impact the elders' mental and physical functions. However, little is known about these experiences of the fractured elders. Purpose. The purpose of this research is to understand (1) the perceived ageism or discriminations, and (2) the uncomfortable feelings and responses to these experiences of the elders with hip fracture. Data and Methods. This is a qualitative follow-up study. Patients above 60 year-old with hip fracture were recruited at Chang Gung Medical Center in northern Taiwan. Interviews were conducted in 1st, 2nd, and 3rd month after discharge by home visiting. Transcribed information was analyzed using content analysis technique described by Miles and Huberman. Results. Four male and seven female hip fractured elders complete the interviews during Jun 2007 to Dec 2008. Two categories of ageism experiences were identified, be thought feeble and isolated. Three categories of responses, aloofly neglected, acceptance, and active rehabilitating, were identified. Conclusion. All cases have experienced more or less ageism, but can manage it. The experiences, feelings and responses are no difference by sex and age. During the period, the ageism experiences still exist, but the uncomfortable feelings and responses gradually diminish.

CROSS-CULTURAL INTERGENERATIONAL COMPARISONS OF ATTITUDES TOWARDS AGING AND PHYSICAL ACTIVITY

L.K. Josyula, R.M. Lyle, *Purdue University, West Lafayette, Indiana*

An online cross-sectional survey examined 475 adults (239 men and 236 women) on physical activity (PA) level, personal and environmental barriers to PA, and attitudes towards personal aging. Participants were classified by citizenship and residence, as 'Indians in India' (II) (n = 146), 'Indians in USA' (IA) (n = 119), or 'Americans in USA' (AA) (n = 210). Groups differed on self-rated general health (II < IA and AA), occurrence of preventive examinations (II < IA < AA), and several barriers to PA. II reported the barriers to PA 'inadequate access' and 'lack

of inexpensive facilities' more than did IA. With 'country raised in' rather than citizenship as the classifier, it was observed that participants raised in India reported lower PA levels (2.94+1.99 vs 3.58+2.27) and more optimistic attitudes towards aging (12.11+14.52 vs 9.05+ 13.85) than did those raised in USA. Residents of USA reported higher levels of PA (3.42+ 2.20 vs 2.70+1.87), and lower overall barriers to PA (4.95+3.62 vs 5.77+4.14) than did residents of India. With participants classified by country raised in, and residence, rather than citizenship, results suggest considerable influence of upbringing on attitudes towards aging and personal barriers to PA, and the impact of residence on environmental barriers to PA. Correlations indicate that enhanced PA may hold the key to a more positive evaluation of personal health and expectations of aging. Barriers reported call for PA-promoting improvements in the built environment and cultural support, particularly in India, where access and affordability of facilities are suboptimal.

PREDICTORS OF MEDICAL STUDENTS' ATTITUDES AND PREPARATION TO COMMUNICATE WITH PATIENTS ABOUT END-OF-LIFE CARE

E. Bower, *Psychology, West Virginia University, Morgantown, West Virginia*

Excellent communication between physicians and patients about end-of-life care (EOLC) is a hallmark of patient-centered care. However, medical students receive limited training on how to communicate with patients about EOLC, and may graduate with negative attitudes about EOLC (Sullivan, Lakoma, & Block, 2003). To be able to improve curricula, first it is important to characterize the current training experience. Medical students at the West Virginia University School of Medicine (n = 169) completed measures about EOLC, including the students' self-rated preparation to provide care, attitudes, knowledge, learning experiences, and perception of a "hidden curriculum" or informal messages about the value of dying patients. Results indicated that didactic education and hidden curriculum predicted students' self-rated preparation to provide care, for example. Knowledge of EOLC predicted attitudes about communicating with patients about EOLC. The findings suggest that in the future, didactic education, hidden curriculum, and knowledge are worthy of further examination, and may be areas to target to improve medical student education.

DO POSITIVE PERCEPTIONS OF AGING INFLUENCE WELL-BEING IN OLDER ADULTS?

J. Morack, L. Ryan, J. Smith, *University of Michigan, Ann Arbor, Michigan*

It has been suggested that feeling positive about how you are aging has important implications for health and longevity. We extended previous research on correlates of personal experiences of aging among older adults by examining associations with personality and a general sense of well-being. To do this we used a 2004 subsample aged 50 and over from the representative Health and Retirement Study (N = 3113). Two stepwise hierarchical regressions were used to evaluate correlates of aging satisfaction and life satisfaction. The predictors in both analyses included sociodemographic variables, health indicators, psychosocial factors, and personality [optimism, control]. The final step of the analysis predicting life satisfaction included aging satisfaction as a covariate. Greatest satisfaction with aging was associated with greater optimism together with better subjective health, less loneliness, and more positive and less negative social support. In the second model examining life satisfaction, it was found that aging satisfaction contributes over and above all other predictors included. Aging satisfaction uniquely explained three percent of the variance in life satisfaction. This provides evidence that positive perceptions of aging influence well-being in older adults. These findings indicate that feeling positive about how you are aging is not simply an artifact of an optimistic personality and health. Future research should investigate the mechanisms underlying pathways that contribute to people feeling satisfied with their aging.

ATTITUDES TOWARD AGING AMONG A POPULATION OF CLINICAL PSYCHOLOGY STUDENTS

S.A. Ogbeide¹, C.A. Neumann¹, K.H. Sorocco², 1. *The School of Professional Psychology at Forest Institute, Springfield, Missouri*, 2. *The University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

Sources of disinterest in geropsychology have been attributed to negative stereotypes toward aging and graduate programs being slow to adopt gerontology and geropsychology courses into their curricula (Hinrichsen & McMeniman, 2002). This study examined the attitudes of clinical psychology graduate students toward personal aging. Age and gender were assessed in relation to attitudes towards aging. One-hundred seventy students ($n = 170$) participated in the study. The Reactions to Ageing Questionnaire (RAQ) was used to assess personal reactions to aging. Data on contact with an elderly individual was also collected to assess the effects on attitudes. Of the three aging categories (gerophobe, neutral, and gerophile), the results show that most students were in the neutral category ($n = 164$, $M = 103.27$, $SD = 7.09$), a limited amount were in the gerophile category ($n = 6$, $M = 122.00$, $SD = 1.41$), and none were in the gerophobe category. A factorial ANOVA showed that there was not a significant interaction between age, gender, and aging attitudes ($F(2, 164) = 1.95$, $p = .14$). The results also showed no difference in the degree of contact with an elderly individual ($F(1, 168) = 2.51$, $p = .11$). Educators aiming to incorporate gerontological learning opportunities into their curricula should not assume that student attitudes are in accord with traditional aging attitudes in the United States. If negative attitudes are decreasing, why is there reluctance for geropsychology practice? Implications for gerontology training and curriculum development in order to encourage positive aging attitudes are examined.

“OLD TALK”: AN INITIAL EXPLORATION OF THE PREVALENCE OF AGEIST SELF-TALK

A.M. Stripling, M. Heesacker, *Psychology, University of Florida, Gainesville, Florida*

This investigation researched adults' use of self statements about or related to being old. Participants' "old talk" was captured through the use of Flanagan's Critical Incident Technique. Participants 18-80 years old ($n = 140$) recalled incidents in which they uttered or thought phrases identifying them as old. Fifty-six percent of participants recalled at least one incident of "old talk". Statements appeared to fall into three categories of being old (a) specific *illnesses, pains, or physical limitations* as indicators (35.4% of the sample; "My back hurts-I feel like an old lady"), (b) *social* indicators (11.4% of the sample; "You're dating an old man"), and (c) *mental* indicators (9.2% of the sample; "My memory isn't what it used to be, I must be getting old"). The most prevalent incidents within the *illnesses, pains, or physical limitations* category involved experiencing pain and stiffness. The most prevalent ones in the *mental* category involved memory and recall. Those in the *social* category frequently identified decreases in stamina as affecting participants' social life. The number of reported incidences of "old talk" was linearly related to age: $F(1,135) = 6.01$, $p < .02$. Younger adults reported less "old talk" than older adults. There was also a curvilinear relationship $F(3,133) = 5.76$, $p < .01$ comprised of two upward linear trends, one from teens to adults under 30 and another from adults in their 30's to the oldest-sampled adults. These two linear trends parallel the shift from time lived to time left that reportedly occurs around middle age.

WHAT CONSTITUTES TRUST WHEN INCLUDING PAID CAREGIVERS IN THE HOME-BASED CAREGIVING TEAM?

D.C. Lewis, W. Cho, *Child and Family Development, University of Georgia, Athens, Georgia*

Paid caregivers can be valuable assets in relieving family caregivers from many of the tasks associated with providing care for aging family members; yet, including paid caregivers in the home-based caregiving

team also can increase family caregivers' stress. While it has been argued that increasing the numbers of paid caregivers in the home-based caregiving team is important, it is equally important to understand positive and negative effects the introduction of paid caregivers have on family caregivers' stress and on family relationships. To explore family caregivers' experiences in utilizing paid caregivers, in-depth interviews were conducted with nine family caregivers. This study found that family caregivers defined satisfaction with paid caregiving and trustworthiness as the belief that paid caregivers would always act in the best interest of care recipients. Paid caregivers' abilities to perform care-related tasks were not primary contributors of family caregivers' satisfaction and trustworthiness in paid caregivers. Instead, family caregivers identified personal characteristics as critical components for a satisfactory experience in use of paid caregivers. Some of these features were personality and previous relationships with the paid caregiver, the formation of relationship characteristics between the care recipient and the paid caregiver (i.e., developing friendships), and family caregivers' accessibility to paid caregivers' background and references. Finally, a focus by the paid caregiver on safety in the physical environment influenced family caregivers' levels of stress. Trust of the paid caregiver was critical for family caregivers to achieve emotional/psychological relief and satisfaction with the inclusion of paid caregivers in the home-based caregiving team.

“IT MAY NOT BE THE IDEAL LIFE, BUT IT’S OUR LIFE”: PRIVACY, SAFETY & CONTROL AMONG CAREGIVERS

L. Reddecliff, E. Slominski, J. Kinney, C. Kart, *Gerontology, Miami University, Oxford, Ohio*

Researchers have amply documented that an overarching concern for family members who provide care for a person with dementia is assuring the safety of that individual. This research explores the perceptions and values of safety, privacy, and personal control among family members who care for a relative with dementia. Following an interview guide, researchers conducted individual interviews with 27 people (19 female) who ranged in age from 40 to 88 years old and had provided care for an average of 50.185 months (range = 6 – 264). Audio taped interviews were transcribed and analyzed using ALTASti software. Findings include: 1) social scientists define safety, privacy and control differently than do caregivers; 2) caregivers do not/can not think of these key values with respect to themselves, but rather in the context of their role as caregiver and/or their relationship with the person with dementia; and 3) there is a disconnect such that caregivers claim that they do not have "issues" with these values, but then elaborate a multitude of ways in which they proactively confront these values in caregiving. For example, one caregiver said that she has no safety concerns in the house, but then stated "I worry about her wandering out and then I don't feel I can leave her alone at any time actually." Another stated that he has no issues with safety, "but 'I'm checking constantly (on her)." [Funded by NIA AG029224]

CAREGIVERS' ACTUAL TIME USE: WHAT DO THE BEHAVIOR DIARIES SAY?

M. Kaschak, S. Tarrant, J. Kinney, C. Kart, *Gerontology, Miami University, Oxford, Ohio*

Despite frequent characterization of family caregiving to a relative with dementia as 24 hours/day, 7 days/week, relatively little research has investigated caregivers' actual time use. Eleven caregivers, predominantly female (81.8%), completed a time diary in which they reported, for the immediate past 24 hours, the activities in which they engaged and other descriptive information about each activity. Prior to completing the diary, caregivers were asked the average number of hours per day they typically spend caring for their relative. We hypothesize that any overestimation of time spent caregiving likely reflects preoccupation with the amount of mental energy invested in the caregiving role. Although five caregivers reported spending an average of 24 hours

per day caregiving ($M(11) = 14.27$ hours), the diaries indicated that, on average, caregivers spent more time apart from their relative than with her/him, 6.05 hours per day with their relative. During these hours, caregivers spent more time physically in their relative's presence than actually interacting with her/him ($M_s = 3.74$ and 2.13 hours, respectively). Activities performed while "physically with" the relative with dementia include discretionary activities such as watching television, resting, and visiting with others – activities in which the individual with dementia was not an involved participant. Most time spent interacting with the individual with dementia included helping with basic ADLs and IADLs (e.g., eating, bathrooming, morning and evening routine) and socializing. This distinction lends additional insight into the time commitment of caregivers. Results have implications for the design of interventions for family caregivers.

DOMAINS OF QUALITY OF LIFE: WHAT MATTERS MOST IN THE CAREGIVING CONTEXT?

E. Slominski, M. Kaschak, J. Kinney, C. Kart, *Gerontology, Miami University, Oxford, Ohio*

Despite considerable research and, practice and interest in technology-based intervention to reduce the burden associated with family caregiving to a relative with Alzheimer's disease, the literature is virtually silent on the most fundamental issues introduced by these interventions: the potential conflict/contradiction among individual values of privacy, safety and personal control. As part of a larger evaluation of an Internet-based monitoring intervention, caregivers to a relative with dementia completed quantitative scales designed to assess twelve domains of quality of life (e.g., spiritual well-being, having meaningful relationships, security/safety; Kane et al., 2003) and completed qualitative interviews that included questions about the values of privacy, safety and control in the context of caregiving. Participants were 27 caregivers (19 female) who ranged in age from 40 to 88 years old and had provided care for an average of 50.185 months (range = 6 – 264 months). Results indicated that, Although caregivers indicated that all twelve domains of quality of life were at least somewhat important to them, when asked to indicate which single domain was most important, spiritual well-being ($n = 9$) and having meaningful relationships ($n = 4$) emerged as most important. Interestingly, whereas 3 caregivers each indicated that security/safety and autonomy was the single most important domain of quality of life, the remaining domains of quality of life that we conceptualized to be most important in the caregiving context (i.e., personal control and privacy) were not identified as the most important domain of any of the caregivers. Results are supplemented with excerpts from the qualitative interviews. [Funded by NIA AG029224]

EXPLORING PREFERENCE FULFILLMENT IN A NURSING HOME SAMPLE

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Psychosocial preferences (e.g., type and amount of social contact, activities, control and independence, caregiver characteristics, and routines) make up the quality of daily life but are not assessed systematically or comprehensively in long-term care. This project builds upon the development of the Preferences for Everyday Living Inventory (PELI) with cognitively intact community elders. The PELI includes 57 items that relate to five preference domains: Caregivers and Care (10 items), Diversionary Activities (8 items), Growth Activities (14 items), Self Dominion (15 items), and Social Contact (10 items). Twenty residents with dementia completed the PELI with the help of a research assistant. Twelve residents scored as moderately impaired ($MMSE=13-24$) and 8 residents scored as mildly impaired ($MMSE=24-29$). Participant profiles were generated graphically and in care planning goal formats and analyzed by residents and nursing home staff qualitatively. The PELI was extended to examine level of preference fulfillment in a

sample of nursing home residents ($N=40$) with and without cognitive impairment. Nursing homes deliver care through multiple disciplines and to ensure content validity of PELI fulfillment, 16 experts were identified: Eight with research expertise and eight with clinical experience in the areas of direct care, nursing, activity therapy, occupational therapy, dietary, social work, environmental services, and administration. These experts rate item relevance to determine content validity based on $p=.05$ standard error to determine level of agreement to ensure the most relevant domains and items were included. Results of this feasibility trial will be discussed in light of implications for person-centered care in nursing homes.

OLDER COMMUNITY DWELLING ADULTS' BELIEFS ABOUT OLD AGE AND SELF-ASSESSED HEALTH EXPECTATIONS

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BACKGROUND: Beliefs that functional and cognitive decline are inevitable consequences of increasing age are challenged by findings of the importance of health behaviors and lifestyle factors in late-onset morbidity and disability. Negative aging beliefs can have implications for the mental and physical functioning of older adults. **METHODS:** 149 congregate meal program participants were asked to list words that came to mind when they thought of 'a typical old person' (Freelist method) during a telephone interview. At an earlier in-person interview, respondents' ratings of present health and health expectations were collected. **FINDINGS:** 81% of subjects ($N=120$) were female, 37% Black, 48% had >1 IADL impairment, with a mean age of 78. Respondents offered more negative to positive age beliefs at a ratio of 2:1. Most (80%) rated their health expectations as good/excellent. Those respondents who rated their health expectations as poor/fair gave more negative old age associations than those respondents who rated them as good/excellent ($p<.01$). Among those adults who rated their expectations as poor/fair, 73% offered no positive aging beliefs versus 51% of those who rated their expectations as good/excellent ($p<.05$). Logistic regression found health expectations for all respondents were associated with number of negative beliefs, even after controlling for number of IADL impairments and present health. **CONCLUSION:** The potential role of positive aging beliefs to influence the association of negative beliefs with health expectations and to encourage health promotion activities (e.g., physical activity, diet, fall assessment) warrants further investigation.

SESSION 1595 (PAPER)

CANCER IN THE LIVES OF OLDER ADULTS

OLDER MINORITY BREAST CANCER SURVIVORS: OUTCOMES OF A BEHAVIORAL INTERVENTION

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African American women have higher breast cancer mortality than whites and are more likely to be obese. Recent clinical trials that tested the impact of lifestyle interventions on cancer recurrence included few older African Americans. This study enrolled 37 African American breast cancer survivors (mean age 60) in need of behavioral change (mean body weight = 190 lbs.; BMI = 32; 33% of calories from fat). A 12-month population-specific lifestyle change intervention included group sessions (4 months) and telephone counseling (8 months). Questionnaire and anthropometric data were collected at entry, post classroom, and at exit. 12-month study completers (68%) improved exercise behavior (+ 3.5 hrs. weekly, $p < .05$), and reduced dietary fat (2.37%) and body weight (1.4 lbs). Over three data collection points weight and BMI showed curvilinear patterns, but both were slightly lower at study exit than at entry. In contrast, exercise gains were maintained over 12 months.

Other gains were: quality of life ($p < .05$); cancer and obesity awareness, motivation, coping ability ($p < .10$). Age effects included: inverse association with study completion ($p < .05$); higher motivation among women aged 60+ ($p = .09$), fewer adverse effects of cancer or its treatment ($p < .05$), and better quality of life than younger women ($p = .08$). Conclusion: Older African American breast cancer survivors benefited from a population-specific lifestyle change program. Weight loss was more difficult to achieve than improvements in physical activity. Age effects were found primarily in study retention and quality of life.

PATIENT-PROVIDER COMMUNICATION: HISPANIC ELDERS AND COLORECTAL CANCER SCREENING

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We conducted a secondary analysis of focus group data, collected from rural Hispanic and Caucasian elders aged 65 and older living in the Mountain West, regarding their attitudes toward colorectal cancer and colorectal cancer screening. The original study sample ($N=24$) included 11 Hispanic and 13 Caucasian participants, with a mean age of 75.2 (SD 7.38). The purpose of our secondary analysis was to develop approaches using cultural communication theory to promote healthy behaviors among Hispanic and Caucasian elders. This analysis focused on the role of cross-cultural communication between patients and providers as a factor influencing Hispanic elders' knowledge of colorectal cancer screening. Constructs from international cross-cultural communication theory, collectivism, time orientation, and power distance, underscore the importance of culturally nuanced communication among Caucasian and Hispanic elders. Furthermore, findings provide formative data that suggest approaches to enhance culturally and linguistically relevant communications when non-Hispanic providers or investigators interact with Hispanic elders. Our findings resulted in specific recommendations for using cross-cultural communication theory to promote colorectal cancer screening, and supported the IOM health disparities report (2004), which recognized the relationship between cultural health beliefs and a range of health behaviors, including preventive measures such as screening.

CANCER LITERACY IN ELDERLY REFUGEES: HOW MUCH DO THE FIRST HMONG GENERATION KNOW ABOUT CANCER?

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Studies investigating cancer in Hmong Americans are extremely limited. Existing literature has mainly focused on cancer epidemiology, including mortality and incidence. To close the knowledge gap, this paper aims to examine cancer literacy which encompasses meaning, beliefs, etiology, treatment, and prevention of cancer in elderly Hmong refugees. Qualitative research was conducted with a total of 30 face-to-face in-depth interviews. The interviews were recorded and translated into English. Using Atlas ti, 5.0, data was analyzed by utilizing grounded theory. Five themes emerged from the qualitative data: 1) no term or concept on cancer in Hmong language, 2) cancer as death sentence, 3) illiteracy on cancer prevention, 4) spiritual cause of cancer, and 5) shaman ceremony as cancer coping and treatment. Cancer literacy on etiology, treatment, and prevention were tremendously low in this population. The findings suggest that the elderly Hmong have unique cultural views on cancer which is grounded on their socio-cultural backgrounds. The provision of cancer education to this population is urgently needed to improve cancer literacy. Cancer education needs to be disseminated using multiple outlets, as many Hmong are illiterate in their own language and has no term or concept on cancer. The venues of education should be also evidence-informed and/or based and culturally competent, as the Hmong may not believe in the education or intervention offered, especially if it does not share many of the core tenets

of Hmong beliefs in regard to meaning, etiology, prevention, and treatment of cancer.

BARRIERS TO CERVICAL CANCER PREVENTION AMONG MIDDLE-AGED AND OLDER RURAL APPALACHIAN WOMEN

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Although cervical cancer rates in the U.S. have declined sharply over the past decades, certain groups of women remain at elevated risk, including middle-aged and older women in central Appalachia. As a part of our community-based, participatory intervention, we examined factors mentioned by Appalachian women as barriers to receiving Pap tests. Using the TTM and PRECEDE/PROCEED models, we administered questionnaires to 432 Appalachian women aged 40-64, years when Pap testing declines and cervical cancer rates increase. 69%, 30%, and 1% of participants had not received a Pap test for 2-5 years; over 5 years, and never, respectively. Barriers include predisposing factors (belief that cervical cancer would have symptoms, not wanting to know Pap test results, and perceiving that Pap tests are too embarrassing, upsetting, and time consuming); reinforcing factors (not having a regular source of medical care, not receiving a physician's recommendation, having a family situation preventing them from engaging in screening, having a male physician); and enabling factors (not knowing where to get a Pap test, not using the health department, not having health insurance, perceived Pap tests to be costly, lack of transportation, and having to take time off from work). We discuss descriptive and correlational analyses from our baseline questionnaire and describe how our CBPR intervention is addressing these barriers. This CBPR project, "Faith Moves Mountains" employs a faith-placed, lay health advisor approach to reduce these barriers to Pap tests for traditionally underserved rural women.

SESSION 1600 (PAPER)

CHARACTERIZING MENTAL HEALTH IN DIVERSE POPULATIONS

MENTAL HEALTH SERVICES STRUCTURE: ON COMMUNITY SENIOR SERVICES AND PUERTO RICAN OLDER ADULTS

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Objectives and Significance: To examine how the structure of mental health services influences understanding and utilization of those services by Puerto Rican older adults in community senior centers. Having exposure and access to mental health services in community contexts may lead Puerto Rican older adults who use community-based services to lesser stigma toward mental health services and increased service use. **Methods:** The total sample was 167 Puerto Rican older adults in Puerto Rico and New York City. A mixed methods design was used with semi-structured interviews on mental health awareness and mental illness perceptions as well as quantitative measurement instruments containing questions about migration activity, mental health need, awareness and use of mental health services. Regression analyses were performed on quantitative data and thematic analysis on qualitative data. **Results:** Findings indicated that the structure of mental health service is significant for Puerto Rican older adults utilizing senior centers. The significance of the services structure on awareness of mental health services is associated with migration, age, and mental health status. Significance of service structures on utilization of mental health services is associated with age and mental health status while modified by the type of housing where participants reside. Narratives of mental illness differed by structure. **Implications:** A major implication from the results is that to better integrate the delivery of mental health services for older Puerto Ricans in community senior centers, it may be important to conduct a

focused intervention using mental health assessments to identify those with mental health needs.

CONGRUENT VERSUS INCONGRUENT LEVELS OF MENTAL AND PHYSICAL HEALTH: PERSONALITY DIFFERENCES

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While physical and mental health are generally positively correlated, the connection is far from absolute, and may become weaker in later life (Aldwin, Gilmer, & Levenson, 2004). The ability to maintain positive mental health in the face of physical declines appears to be a factor in optimal aging. Here, data from members of the longitudinal Berkeley Growth, Berkeley Guidance, and Oakland Growth Studies (N=85) are explored to examine personality differences between those with congruent (high-high or low-low) and incongruent (low-high) levels of physical and mental health. Self-report SF-36 data, collected from participants in 2006, when they were either age 77 (Berkeley Growth or Berkeley Guidance Studies) or 85 (Oakland Growth Study), allow us to classify individuals as either both physically and mentally healthy (44; 52%), both physically and mentally unhealthy (11; 13%), or physically unhealthy but mentally healthy (30; 35%). Personality was assessed via the 20 "folk scales" of the California Psychological Inventory. MANOVA analyses, with Bonferroni post hoc tests, indicate that personality characteristics appear to primarily differentiate those who are both physically and mentally unhealthy from the remaining two groups. Those who report both poor physical and mental health are noteworthy in their low levels of Capacity for Status, Social Presence, Self-Acceptance, Independence, Empathy, Responsibility, Well-Being, Achievement via Conformance, Achievement via Independence, and Intellectual Efficiency. Classification into health type group does not vary by gender, cohort, or marital status. Results indicate the value of disentangling the independent effects of physical and mental health in older individuals.

INTERDISCIPLINARY APPROACH TO ENHANCE RURAL BEHAVIORAL HEALTH CARE: A UNIVERSITY/ACADEMIC PARTNERSHIP

M.R. Crowther, *Psychology, The University of Alabama, Tuscaloosa, Alabama*

About 20% of the US population live in rural areas, which are usually Mental Health Professional Shortage Areas. Across the 3075 counties of the country, 55% have no practicing psychologists, psychiatrists, or social workers. To provide competent and needed behavioral healthcare requires a willingness and an ability to draw on community-based values, traditions, and customs to work with persons of and from the community in developing interventions, support groups, and outreach efforts. In rural and frontier family practice clinics, between 50 and 70% of the patients present with symptoms that are complicated by or due entirely to behavioral health problems. In spite of the need, less than 10% of the healthcare training programs in the US provide training in interdisciplinary collaborative healthcare. To address this gap, our Interdisciplinary team provides healthcare screens on a mobile unit, extensive behavioral healthcare assessments, individual therapy, and an anti-stigma campaign targeting African American elders. The goal of the project is to address issues common to rural mental health, minority aging, and training by supporting: a) community-based approach directed to both enhance the training of scholars and contribute to the well-being of rural elders; b) interdisciplinary collaboration between geropsychology, Rural Medicine, and Social Work; and c) the dissemination of promising practices in rural education and issues related to rural mental health and aging. This proposed presentation will provide an overview of the collaborative process between the different University disciplines and the Rural Community Mental Health Center including resource sharing, program implementation and planned assessment.

SOCIOCULTURAL INFLUENCES ON MENTAL HEALTH SERVICE USE FOR DEPRESSION BY LATINO OLDER ADULTS: EXPLORING THE MEDIATING AND MODERATING ROLE OF SOCIAL SUPPORT

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Background and Objectives: The study investigated the underutilization of mental health services by low-income Latino older adults. The mediation and moderation effects of support on service use were explored while accounting for dimensions of support and sociocultural factors. **Methods:** Secondary data analysis of a cross-sectional survey of older Latinos (n=235) was conducted using path analysis with Poisson regression to assess mediation and moderation models by type of support (emotional and instrumental). **Results:** Findings revealed significant moderation effects across models. Under conditions of low support, low linguistically acculturated Latinos used fewer services. Small variations by type of support emerged with emotional support presenting the best model fit. The direct effects of language acculturation and age remained after controlling for need. **Conclusions:** Findings reveal limited support as a risk factor for the underutilization of mental health services by low acculturated older Latinos as they increase in age. Integrating support resources that assist in navigating service systems and address language barriers can enhance service use by Latino older adults. Implications for outreach and screening are discussed.

SESSION 1605 (PAPER)

CONTEXTUAL INFLUENCES IN NURSING HOMES

THE ROLE OF LEADERSHIP IN FACILITATING SUSTAINABLE CULTURE CHANGE IN IRISH NURSING CARE SETTINGS

L.E. Carragher, A. Coyle, R. Bond, B. Lynch, *DKIT, Dundalk, Ireland*

Introduction The Irish Health Service Executive is supporting an evaluation of the Teaghlach Model on the culture of two of its nursing homes. The Teaghlach Model promotes person-centred care in a home-like environment, with domestic style units or households where residents direct their own lives, supported by consistent and valued teams. While person-centred care is acknowledged as the best outcomes for patients (Farley, 2001) and nursing care staff are increasing expected to deliver the necessary changes in the culture of organisations (Health Information and Quality Authority, 2008), sustainable cultural change remains largely an aspiration for nursing homes. The aim of this study is to explore the role of leadership in facilitating sustainable culture change in nursing home settings. **Method** A mixed-methods approach was used to gather data pre-and-post implementation, involving interviews, observations, and focus groups with staff, residents and family members to provide an insight into working practices and attitudes to interventions. Data analysis was based on grounded theory. **Results** Preliminary results suggest care staff are supportive of the underlying ethos linked to culture change, but have many concerns around health and safety issues. **Discussion** Preliminary findings from this study point to a need for more open debates on the tensions between health and safety and quality of life of residents. Ongoing support has emerged as an important factor in terms of the meaningful engagement of resident and staff and the sharing of values, beliefs and norms.

TOWARD AN UNDERSTANDING OF AND SOLUTIONS FOR HOME MAINTENANCE AND MANAGEMENT NEEDS FOR SUCCESSFUL AGING IN PLACE

C.B. Fausset, A.J. Kelly, W.A. Rogers, A.D. Fisk, *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*

A goal of many older adults is to remain in their own homes as they age (Beyond 50.05 Survey, 2005). However, age-related changes can make living independently (aging in place) a difficult task for many older adults. For example, older adults have described problems and

frustrations in everyday activities including leisure activities, transportation, housekeeping, and home maintenance (Rogers, Walker, Meyer, & Fisk, 1998). The goal of the current study was to specifically explore the arena of home maintenance and management, which is essential for people to successfully age in place. We conducted focus group interviews to determine the specific tasks older adults must perform to manage and maintain their homes. There were multiple groups of six to seven adults per group between the ages of 73 and 85 years (mean age 78.8; 19 women, 7 men). All participants were living independently. Participants described performing a wide range of routine home maintenance tasks and the difficulties encountered when performing these activities. Transcripts were coded using both top-down and bottom-up qualitative coding techniques. We classified participants' solutions to manage these difficulties into three broad categories: "Cessation," "Perseverance," and "Compensation." Exploring these categories offers opportunities for interventions that facilitate older adults to remain living independently in their homes. We discuss the nature of home maintenance problems older adults encounter, provide suggested interventions to those problems and human factors design solutions to alleviate the major problems. Finally, we discuss helping older adults to recognize and predict the difficult home-based tasks.

MEASURING BARRIERS TO IMPLEMENTING EVIDENCE-BASED PRACTICES INTO NURSING HOMES

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A number of large-scale, multi-site studies have identified factors that influence the use of research and implementation of evidence-based practices by nurses and other clinical staff in medical settings. Because existing measures used by these studies to assess various barriers are not suitable for use with multidisciplinary nursing home staff, the goal of this study was to develop and validate an instrument that was appropriate for use in long-term care settings. The Evidence-Based Practice in Nursing Home Scale consists of 28 items that respondents' rate using a Likert scale format to assess barriers to using research findings and implementing evidenced-based practices in nursing homes. This presentation will describe the steps to develop and validate the measure, identify potential barriers in nursing homes, and provide methods to increase uptake of research and evidence-based interventions by nursing home staff. Because it is unknown what barriers hinder adoption and wide spread use of new interventions by nurses and certified nursing assistants, this measure has the potential to inform researchers, clinicians, and administrators about perceived constraints relative to the culture and resources available within nursing homes. Knowledge of personal and environmental factors affecting implementation is the first step toward developing programs that can enhance and facilitate use of research and evidence-based practices in long-term care settings. Implications for the use of the Evidence-Based Practice in Nursing Home Scale in practice will be discussed.

EVALUATING THE HOMES OF OLDER ADULTS TO ENHANCE AGING IN PLACE

M. Teaford, S. Zavotka, *Allied Med, The Ohio State University, Columbus, Ohio*

Over 90% of older adults want to remain in their long time homes and "age-in-place" (AARP, 2000). Reasons include attachment to home, location, and being close to family members (Hartje, 2004). With arthritis and heart disease, however, they have diminished functional health. Many live in older multi-story homes that pose safety problems. Yet they are reticent to make the changes to their homes due to negative perceptions of aging (Miller and Olson, 2006). The purpose of this study was to determine 1) how well current housing occupied by older adults meets the Universal Design standards that would allow them to age in place and 2) to discover what strategies would encourage making changes

to their homes. Researchers conducted interviews and universal design home assessments with older homeowners living in a major metropolitan area. The sample consisted of 61 homeowners who ranged in age from 65 to 91 years old (median age = 77.6). The majority had several chronic health problems. Average age of homes was 45.1 years. Results of this study indicate that the majority of older adults were living in houses that would not support their desire to age in place. Based on an adaption of a rating system developed by Andes and Beamish (2005), each home was assigned a total universal design score and subtotal scores for safety, accessibility, and convenience. Total universal design housing assessment scores ranged from 10 to 63 out of 100 (mean 40.5).

PLACE-BASED HOUSING ASPIRATIONS OF OLDER ADULTS?

L.E. Carragher, R. McKeever, D. Getty, R. Bond, *DKIT, Dundalk, Ireland*

Introduction We live in an ageing society where people are living longer and have higher expectations for quality of life during old age. These changing demographics and attitudes to old age have profound implications for housing policy. Lifestyle choices need to be taken into account alongside concerns for increases in frailty and dependence. Yet much of the housing literature directed at later life is concerned with increasing frailty, while the housing needs of the majority of well older people has been little remarked upon (Appleton, 2002). This doctoral study uses a multi-dimensional place attachment model to explore the housing aspirations of older people across tenures and in different locations. **Method** A predictive model will be used to explore differences in older adults' housing aspirations and attitudes to place. This model will comprise: age of respondent, number of people living in property, tenure, location (urban/rural), condition of property, perceptions of neighbourhood, and age-friendliness. Data will be generated via a large questionnaire survey (n=1000). This questionnaire will include sections comprising questions on home and community, and health and psychosocial well-being. A 40-item age-friendliness measure has been developed, comprising 8 subscales. **Results** Comprehensive results from this study will be available in June 2009. Preliminary results indicate that the 8 subscales of the age-friendliness measure have good psychometric properties. **Conclusion** Changing attitudes among the older age group present considerable challenges for housing providers. Meeting these challenges must begin with evidence-based practice, and the results of this study will make an important contribution to this.

SESSION 1610 (POSTER)

DEMENTIA - BSS POSTER SESSION

RESIDENT-ASSISTED MONTESSORI PROGRAMMING (RAMP): TRAINING NURSING HOME RESIDENTS TO SERVE AS GROUP ACTIVITY LEADERS

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In an ongoing NIMH-funded research study titled "Resident-Assisted Montessori Programming" (RAMP), nursing home residents with early-stage dementia are being trained to lead Montessori-based group activities for persons with more advanced dementia. This presentation will focus on results from the first phase of the study, in which five residents (mean age 71 and mean MMSE total score 22.75) from two facilities were trained to lead two activities: Memories Squared® and Reading Roundtable®. A description of these activities will be provided. Twenty-two resident participants (mean age 82 and mean MMSE total score 19.6) took part in activities conducted by resident leaders. Baseline observations of the participants' engagement and affect during standard, staff-led activity programming were taken prior to the implementation of RAMP programming using the Menorah Park Engagement Scale (MPES). Treatment MPES observations were then taken during activities led by residents. Significant changes from Baseline to Treatment

were found. For example, there was a statistically significant increase from Baseline to Treatment in the percentage of MPES observations for which Pleasure was observed (29% to 44%) and a statistically significant decrease in the percentage of MPES observations for which Other Engagement was observed (26% to 7%). Residents were able to lead activities up to 45 minutes with less than one minute of staff assistance. Preliminary results suggest that nursing home residents are capable filling important social roles. After attending this presentation, audience members will be able to describe the RAMP activities, training procedures used, and outcomes of the first phase of the study.

UTILISING THE EMOTIONAL STROOP TASK TO INVESTIGATE IMPLICIT AWARENESS OF MEMORY DIFFICULTIES IN PEOPLE WITH DEMENTIA AND THEIR CAREGIVERS

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The emotional Stroop paradigm is based on the observation that individuals respond more slowly to words that are salient to their condition than to neutral words, even when these are not explicitly processed for meaning. This study investigated whether PwD were slower to respond to dementia-related words, such as 'remember', 'forgetful', etc, than to frequency-matched neutral words, such as 'borrowing', 'physical', etc. It was hypothesised that implicit awareness of memory difficulties would lead to a slowing of response times to the emotionally salient dementia-related words. The sample consisted of 79 PwD who were diagnosed with Alzheimer's disease, vascular dementia or mixed AD and vascular dementia, and 85 normal controls, who were caregivers of the PwD. It was found that PwD were slower to respond to emotionally salient words compared to emotionally neutral words. Additionally it was found that carers also responded more slowly to emotionally salient words compared to emotionally neutral words. There was no difference in the size of the effect between PwD and their caregivers. This suggests that PwD demonstrate an implicit awareness of their memory impairments. Therefore, awareness of memory difficulties seems to be retained at an implicit level in early-stage dementia. The emotional Stroop task is a useful method for directly investigating the robustness of the implicit awareness system.

THE INFORMATION BEHAVIOR OF CARERS OF PEOPLE WITH DEMENTIA: WHAT DIFFERENCE DOES A YEAR MAKE?

P.A. Bath, J.A. Harland, *Information Studies, University of Sheffield, Sheffield, United Kingdom*

Understanding the information needs of carers of people with dementia at diagnosis is important as provision of high-quality information may help carers to cope better in the early stages. However, dementia is a long-term condition, which progressively worsens over time, so that the information behavior of the carer may change as they have to cope with new situations and take increasing responsibility for the everyday care of the person with dementia. The aim of this longitudinal study was to investigate the information behaviors of people with dementia. Here we present the results of follow-up interviews with 12 informal carers, just over one year after diagnosis. Qualitative analysis of the transcripts revealed that many carers recognised a deterioration in the person with dementia, which raised new questions about how they should provide the best care and cope with what they perceived to be 'problematic behavior'. Carers wanted the opportunity to talk with medical professionals to try to make sense of these changes, but reported that the only contact that they had were annual check-ups. The carers that used the Alzheimer's Society reported that it was useful for providing practical advice but they also wanted a central hub where medical and social services support and information could be provided as they did not have the

time to consult numerous different sources. Gaining an understanding of the changes that take place over time should help professionals recognize that information and support is required throughout the course of the disease, not just at diagnosis.

A BEHAVIORAL INTERVENTION TO REDUCE AGITATION IN INDIVIDUALS WITH DOWN'S SYNDROME AND DEMENTIA

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The majority of individuals with Down's syndrome (DS) develop dementia of the Alzheimer's type (AD) and the morbidity prevalence increases with advancing age. In fact, as many as 54.9% of individuals with DS develop dementia (Cooper and Prasher, 1998). As a result of the dementing process, residents exhibit challenging behavior; the most common of which is agitation (i.e., physical and/or verbal aggression, restlessness). Agitation can both negatively affect quality of life and increase caregiver burden. While interventions have been developed to effectively reduce these behaviors in individuals with AD and in individuals with DS, a paucity of research has focused on individuals with comorbid DS and AD. The present study extended the current literature regarding the effects of behavioral interventions on reducing agitation to implement and evaluate individualized function-based interventions for individuals with comorbid DS and AD. The interventions were designed based on the results of the Motivation Assessment Scale (MAS: Duran & Crimmins, 1988), which was used to identify possible functions or motivators of behavior. A multiple baseline design across participants was utilized to evaluate the effect of the intervention on agitated behavior. In addition, staff-reported levels of agitation were measured by administering the Cohen-Mansfield Agitation Inventory (CMAI; Cohen-Mansfield, Marx, & Rosenthal, 1989). Case study data detailing the design and implementation of the behavioral interventions will be presented. Implications for care providers' management of problem behaviors will be discussed.

THE RELIABILITY OF SELF REPORTED FUNCTIONAL ABILITY IN MILD COGNITIVE IMPAIRMENT

J. Roberts, L. Clare, S. Nelis, A. Martyr, *Bangor University, Bangor, United Kingdom*

The most commonly used diagnostic criteria for mild cognitive impairment (MCI) require that functional ability is retained, although the limited research in this area suggests that varying degrees of functional difficulty can be observed in people diagnosed with MCI. One reason for this discrepancy may lie in a reliance on self-reported information about functional ability. The present study aimed to compare self- and informant ratings of functional ability in people diagnosed with MCI. Twenty people (mean age 74 years) diagnosed with MCI at a specialist memory clinic and an informant (mean age 68 years; 75% spouses; 80% co-resident with the person with MCI) responded to an 11-item modified functional activities questionnaire (FAQ; maximum possible score 33, with higher scores indicating greater functional difficulty), covering areas such as finances, shopping, hobbies and travel. Most people with MCI recognised some functional difficulty (mean score 3.1, s.d. 3.04, range 0 – 11) and most informants reported higher levels of functional difficulty (mean score 10, s.d. 8.41, range 0 – 30). The majority (85%) of the participants with MCI reported less functional difficulties than did informants (mean discrepancy score 6.9, s.d. 7.8). Correlation between self- and informant report showed a weak relationship ($r = .37$). This lack of agreement between the person with MCI and the informant when rating functional abilities raises the possibility that self-report may be unreliable. Clinicians should consider obtaining corroborative evidence regarding functional ability prior to making a diagnosis of MCI.

THE EFFECT OF SHARED MEMORY IN FORMING FRIENDSHIPS BETWEEN LONG-TERM CARE RESIDENTS WITH DEMENTIA

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Shared memory (i.e. a common theme discussed between two people through conversation) in residents with varying severity of dementia may play a role in the ability to sustain conversation and form friendships. Observations of 21 residents who live in a long-term dementia facility were recorded with audio and video equipment in a common area through out various times of the day. Conversation material and frequency of conversation between residents were also coded according to subject and theme. Dementia interferes with memory processes and affects the ability to recall personal events from life to share, without this ability, friendships are more difficult to initiate and sustain. When two people are engaged in friendly conversation, recall of past life memories are facilitated. Further research may explain the purpose of friendly relationships among cognitively impaired individuals with dementia and the impact on management of behaviors.

THE INFLUENCE OF LIFE REVIEW INTERVENTION ON COGNITIVE FUNCTION AND ACTIVITIES OF DAILY LIVING IN ELDERLY WOMEN REQUIRING LONG-TERM CARE

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The aim of this study was to clarify whether the life review interventions affected the physical and mental functions of the elderly women requiring long-term care. We investigated the influence of the life review interventions which were performed for a month. The intervened participants were seven elderly women (age 85.7+/-8.3) in a geriatric health services facility, Himeji, Hyogo, Japan. We selected the control group consisting of seven women (88.0+/-2.6) in the same facility. We carried out a baseline survey at the end of January 2008, and the follow-up study was done at the end of February 2008. We evaluated their physical and mental functions using the questionnaires such as Mini Mental State Examination (MMSE), modified Barthel Index, Dementia Behavior Disturbance, Todai-shiki Observational Rating Scale, Minimum Data Set, Vitality Index, and Satisfaction. From the comparisons of the average scores of the questionnaires between pre- and post-intervention using generalized linear model, MMSE score significantly increased in the intervention group ($P<0.05$). In particular, the score of "Delayed Verbal Recall, in which the participants recalled three words we previously asked her to remember", significantly increased ($P<0.05$). These results suggest that life review interventions could improve cognitive function of the elderly women requiring long-term care.

PAIN SCREENING IN PERSONS WITH DEMENTIA

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Persons with dementia are at high risk for under-diagnosis and under-treatment of pain, yet it is unclear how to best screen for pain in this vulnerable population. Nursing assistants could potentially be an important source of screening information because of the large amount of time they spend with residents. The main objective of this study was to compare three common pain screening approaches against a palliative care

physician pain rating: chart review, self-report, and nursing assistants behavioral observation. This study was conducted in four community nursing homes and used a cross-sectional design. The sample included 83 residents with moderate to severe dementia. Resident pain self-reports were collected with the Pain Thermometer and questions from the Structured Pain Interview. Chart reviews were conducted to gather information about current pain-related conditions, analgesic use, and any documented pain assessment and management details. Nursing assistant observations were collected with the Non-communicative Patients Pain Assessment Instrument (NOPPAIN) following performance of morning care activities. Palliative care physician consensus pain ratings served as the criterion. Neither chart review information nor self-reports from persons with dementia were significantly correlated with the physician pain rating criterion. Nursing assistant NOPPAIN ratings were significantly associated with the physician pain rating criterion. The NOPPAIN, when administered by nursing assistants, appears to be a valid method of pain screening in persons with moderate to severe dementia. In contrast, self-report and chart review performed poorly as pain screening methods.

PREMORBID PERSONALITY AND ITS RELATIONSHIP TO DEMENTIA BEHAVIORS

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Four to five million Americans are affected currently by dementia and it is considered the leading cause of institutionalization among the elderly. Approximately 90% of clients with dementia demonstrate problematic behaviors, such as vocalizations, aggression, wandering, and delusions, in addition to cognitive and functional losses. These clients also may demonstrate more passive behaviors that often go unnoticed in the long-term care setting. There have been claims that clients with dementia lose themselves during the disease process, however theoretical and empirical evidence suggests that clients with dementia can maintain their sense of self or personhood throughout the dementia process. It is possible that while some changes in personality occur during the progression of dementia, the link between premorbid personality and behavior is retained to a degree that allows some prediction of dementia behaviors from knowledge of premorbid personality traits. The purpose of this study is to examine premorbid personality in clients with dementia and determine if those traits or facets can indeed predict specific dementia behaviors. Descriptive, correlational analysis and predictive regression analysis will be used to examine data in ninety residents from three nursing homes in southeastern Minnesota. This study utilized five separate instruments to measure cognition, functional ability, passive behaviors, aggressive behaviors, and personality traits and facets. With a better understanding of how premorbid personality plays a role on dementia behaviors, health care professionals may be able to implement interventions, improve outcomes, and improve these clients quality of life by understanding their needs.

BEYOND THE OBSERVABLE: EXAMINING SELF-REPORTED EXISTENTIAL WELL-BEING IN PEOPLE WITH DEMENTIA

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The well-being of people with dementia is not well understood. Researchers often measure their well-being through observational methods or via proxies, but self-report is rarely used. Recently there is evidence that people with mild to moderate dementia are able to give reliable reports of their well-being, but empirical work in this area is limited. Most dementia-specific measures focus on mood or life satisfaction, and there are few that gauge more existential aspects of well-being (e.g., purpose in life). This study tested the use of a non-dementia-specific well-being measure in people with mild to moderate dementia. The relationship between goal pursuit, a predictor of well-being, and purpose

in life, an aspect of psychological well-being, was examined through questionnaire and experimental methods. The moderating effect of dementia severity was also investigated. Results showed that people with dementia were able to provide reliable self-report data on their well-being. A strong association between goal pursuit and purpose in life emerged, but dementia severity did not moderate this relationship. Experimental results were similar in that people who participated in a goal-directed activity reported a greater sense of purpose than those who participated in a goal-undirected activity. Implications for the study of well-being in dementia and its application in community settings are discussed. Understanding these relationships will illuminate the experience of psychological well-being in dementia and perhaps inform some methods of shaping activities to enhance psychological well-being.

NO LAUGHING MATTER?: HUMOR AMIDST THE CONCERNS OF ADULT CHILDREN OF PARENTS WITH ALZHEIMER'S DISEASE

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Past research has shown that adult children of parents with Alzheimer's Disease (AD) exhibit heightened concerns about their own potential for developing AD. In 2000, Cutler and Hodgson conducted a baseline study of 258 middle-aged men and women on their personal concerns about developing AD. In 2005, 2nd wave follow-up data were collected from 80% of the original sample (N=206). Based on T1-T2 differences, a sub-sample of 59 respondents whose level of AD concern had increased over the 5 year interval was selected for intensive qualitative interviews; the interviews focused specifically on the context of their concern (why it had increased, with whom they had discussed it, what they had done to deal with it). All data were evaluated for underlying themes and patterns using NVivo software. The current study looks at one of the most robust themes to emerge from the data, the use of humor in the context of AD anxieties. For more than a third of the respondents, humor was mentioned as it relates to the trajectory of their increasing fears about AD. From their responses, humor plays several roles in overall concerns: as a coping mechanism, as a method of denial, as a communication tool, and as a way of approaching the seriousness of their fears. All are demonstrated by the data. For adult children of parents with AD, laughter about their own concerns about developing the disease may offer an unexpected but powerful benefit.

WHAT ARE THE UNMET NEEDS OF NURSING HOME RESIDENTS WITH DEMENTIA?

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Our approach for providing interventions for agitation (TREA – 'Treatment Routes for Exploring Agitation') is based upon a theoretical framework that provides a systematic methodology for individualizing non-pharmacological interventions to the unmet needs of agitated persons. This study was conducted to elucidate underlying unmet needs in a group of 61 agitated residents from 5 different nursing homes. Using TREA, the unmet needs of the agitated residents were identified through data collection from nursing assistants as well as through observation of the agitated person's behavior by trained research assistants, after which personalized interventions for decreasing agitation were delivered to the residents. Observations by research assistants were repeated. Analysis revealed that the most common unmet needs were: Loneliness/Need for social interaction, Boredom/Sensory deprivation, and Need for meaningful activity. Many other types of needs were reported at lower frequencies. In addition, we examined agreement between data obtained from nursing assistants and observations by research assistants, and from the pre- intervention and post- intervention observations by the research assistants. Finally, this study demonstrates the potential for combining a quantitative aggregate (nomothetic) methodology with an approach that stresses the need to individualize

the non-pharmacological treatment of agitation (ideographic methodology). This study was supported by grant #5R01AG010172-13

STAGING AN INDIVIDUAL'S EMOTIONAL RESPONSE TO THE PROCESS OF ALZHEIMER'S DISEASE

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Earlier detection and diagnosis has led to the identification of an increasing number of persons with early Alzheimer's disease (AD). There is growing recognition that individuals with this diagnosis also experience significant clinical and sub-clinical emotional responses to their disease process. Using a phenomenological approach, the emotional experiences of individuals diagnosed with early AD were explored. Findings suggest that anxiety is highly associated with the period beginning with symptom recognition and ending about 1 year following diagnosis. After that time, other emotional states such as frustration and anger seem to predominate. Staging the emotional states associated with the progression of AD and the implications of this information for identifying non-pharmacological treatment approaches are discussed.

EXAMINING WORRIES AND GENERALIZED ANXIETY DISORDER IN PATIENTS WITH DEMENTIA

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Anxiety is a common occurrence in persons with dementia. However, research on the strategies to define and assess anxiety in this population is limited. This study investigates the topics of worry in patients with dementia and anxiety who do and do not have GAD. Currently 37 patients and 37 have been recruited in a completed pilot and on-going clinical trial for psychosocial anxiety treatment. The patients are 49% male, primarily Caucasian 67% and ages range from 55 to 96 (M = 80, SD = 9.53). All included patients have a dementia diagnosis and screened positive for anxiety on the neuropsychiatric inventory. Each patient and collateral completes a structured interview on worry topics, the Mini International Neuropsychiatric Interview and the Clinical Dementia Rating scale (CDR). Seventeen patients (46%) meet criteria for GAD and 13 (35%) for depression. The most common worries are regarding family (78%), own health (62%) and loved ones' health (59%). The patients with GAD worried significantly more about minor matters ($\chi = 7.77$, $p < .01$) and community/world affairs ($\chi = 5.12$, $p < .02$) compared to the patients without GAD. Overall patients with mild dementia (CDR ≤ 1) endorsed more worry topics (mean of 5 topics per patient) compared to moderate dementia patients (CDR > 2 ; mean of 3.2 topics per patient, $t = -2.03$, $p < .05$). Our current results indicate that dementia patients with anxiety frequently endorse worries and those with GAD follow similar patterns of worry to what is reported in non-dementia patients.

PROFESSIONALS' KNOWLEDGE: PAIN PRACTICES IN AFRICAN-AMERICAN NURSING HOME RESIDENTS WITH DEMENTIA

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The purpose of this study was to describe the knowledge of nurses and physicians about pain assessment and management in African-American nursing home residents with dementia. Fifty-seven nurses from three nursing homes and three geriatricians from an academic center in metro-Houston completed the pain questionnaire. Three scenarios portrayed African-American residents with dementia as displaying common and subtle behavioral indicators of pain. Descriptive statistics were used to analyze demographic data and responses to the questions. A subgroup analysis using chi-square test was completed with Certified Nursing Assistants (CNAs) and Licensed Vocational Nurses (LVNs) on

selected questions. A majority of the participants were female ($n = 51$, 85%), between 40 to 59 years of age ($n = 28$, 46.7%), and African-American ($n = 43$, 72%). Most participants were CNAs ($n = 31$, 51.7%) or LVNs ($n = 22$, 36.6%). Thirty-one (51.6%) participants reported 10 years or less experience in nursing homes. Over half of the participants do not use clinical guidelines for pain assessment and management. Nurses and physicians more accurately identified common indicators of pain than subtle indicators of pain. Nurses administered Darvocet as ordered to manage pain. Heat/cold applications were most commonly used. The subgroup analysis indicated that CNAs were less likely to monitor pain than LVNs for two of the three scenarios ($p = 0.01$ and 0.04). These findings suggest the importance of education to include subtle indicators of pain, administration of geriatric appropriate medications, expansion of nonpharmacologic pain management practices, and implementation of clinical guidelines.

THE POTENTIAL UTILITY OF VIGNETTES AS AN INDIRECT MEASURE OF AWARENESS IN EARLY STAGE DEMENTIA

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Awareness can be conceptualised as the accuracy with which a person appraises his/her functioning and situation. Disturbances of awareness in people with early-stage dementia have been extensively documented. Level of awareness has been inferred from a range of assessment methods including clinician ratings, patient/informant discrepancy ratings, and questionnaire/task performance discrepancy ratings. These methods primarily involve an evaluation of explicit expressions of awareness. Awareness may also be expressed in a more indirect way. Research has largely failed to address the issue of indirect or implicit manifestations of awareness. This study reports the development of an indirect assessment of awareness using vignettes. We developed three vignettes describing short scenarios of individuals showing behaviour that implied or was typical of these: established dementia, possible/early-stage dementia, and healthy old age. Ninety two people with early stage dementia were asked to describe how they perceived the situation/difficulties of the person in the scenario and what advice or potential solutions they would propose. Responses were coded in terms of appropriate problem identification and the appropriateness of responses to the possible solutions within the scenarios. We found that some respondents did use dementia and memory loss as possible explanations for the scenarios whilst others attributed the problems to old age or provided irrelevant accounts. Some respondents also related the items to themselves and their own personal experience of memory difficulties. People who are unable or reluctant to explicitly acknowledge their own difficulties may indirectly report awareness of memory difficulties with this emerging approach to studying awareness.

ELECTROMAGNETIC FIELD EXPOSURE AT WORK AND SUBSEQUENT RISK OF DEMENTIA

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We examined work-related exposure to low-frequency electromagnetic fields (EMF) in relation to dementia and Alzheimer's disease (AD), and occupational status as a potential modifier. We used all 9,954 individuals from the Study of Dementia in Swedish Twins (HARMONY) with complete occupational and diagnostic data. Dementia diagnoses were based on telephone screening and in-person work-up. Main occu-

pation was matched to an EMF occupational exposure matrix. Covariates included age, gender, education, vascular risk factors, and occupation-based measures of work complexity, physical demands, and undesirable working conditions. EMF exposure was dichotomized at 0.12 microtesla. We used generalized estimating equations (GEE), which can adjust for data dependency, with the entire sample and conditional logistic regression with complete twin pairs discordant for dementia status. In fully adjusted models, medium/high EMF exposure was associated with increased risk of dementia (odds ratio [OR]=1.36, 95% confidence interval [CI] 1.01-1.84) but the association was not statistically significant for AD alone (OR=1.29, 95% CI 0.89-1.85). The associations were modified by occupational status for both dementia and AD. The risk associated with EMF exposure appeared to be greater in former blue-collar workers (OR=1.54, 95% CI 0.98-2.45 for dementia; OR=1.78, 95% CI 0.96-3.31 for AD) but not white-collar workers (OR=1.02, 95% CI 0.61-1.70 for dementia; OR=0.88, 95% CI 0.48-1.63 for AD). Co-twin analyses, although underpowered (58 dementia-discordant pairs, 32 AD-discordant pairs), yielded similar findings. EMF exposure appears relevant to dementia risk primarily in former blue collar workers, possibly due to other adverse work exposures that may magnify the effects of EMF exposure.

AN INTEGRATIVE REVIEW: MEASURING MEALTIME DIFFICULTIES IN OLDER ADULTS WITH DEMENTIA

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Dementia is one of the most burdensome conditions in late life and difficulties at mealtime can increase this burden. In the early 1990's, adequate instruments to measure mealtime difficulties in older adults with dementia were scarce. The objective of this integrative review was to determine the current state of instruments available to screen or assess for mealtime difficulties; specifically instruments measuring eating, feeding, and meal behaviors in the older adult with dementia. Database searches were conducted in EBSCOhost, PubMed, CINAHL, Science Direct, AgeLine, and HaPI. Twelve instruments were identified that met the inclusion criteria; only one instrument has been extensively tested for reliability and validity with psychometrics reported in the literature. The majority of instruments have only been used in research studies. Instruments to measure mealtime difficulties will inform the effect of interventions targeted to alleviate nutritional deficiencies. The Edinburgh Feeding Evaluation in Dementia Scale (EdFED) was the only instrument identified for clinical practice through this review. Resources for clinical use of the EdFED are currently being disseminated by the New York University Hartford Institute for Geriatric Nursing's Try This series, with a companion training video - How to Try This. In using the EdFED, interventions can be planned to monitor and promote the nutritional status of older adults with dementia.

SESSION 1615 (PAPER)

EMOTIONAL OUTCOMES, TRAUMA, AND MORTALITY

AGE GROUP DIFFERENCES IN FACETS OF POSITIVE AND NEGATIVE AFFECT

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Age group differences in affect are relevant to issues of well-being and emotion regulation. To date, little work has focused on age differences in the facets of positive (PA) and negative affect (NA). The current, cross-sectional study determined age group differences in the structure of affect at the level of subscales. Sample: Older ($N = 212$; M age = 73.5 years) and younger adults ($N = 349$; M age = 19.1 years) rated

their general trait affect on the Positive and Negative Affect Scale (PANAS-X; Watson & Clark, 1994). The PANAS-X has three PA subscales (joviality, self-assurance, attentiveness) and four NA subscales (fear, sadness, guilt, hostility). Results: Older adults reported significantly lower scores on four NA facets and higher scores on one PA facet (attentiveness) than younger persons. Several correlations between PA and NA facets were significantly more negative in older than younger adults. Inter-correlations among all PA subscales were significantly stronger for older than younger participants. Discussion: Mean-level findings across PA and NA facets indicate greater emotional health in late life. Further, different aspects of PA were more tightly linked with one another in older than younger persons, suggesting greater coherence in positive emotions in older persons. PA and NA facets were more negatively associated in older than younger persons. This finding is intriguing because it is inconsistent with hypotheses that affect is more mixed across valence in older than younger persons (i.e., Carstensen et al., 2000). Methodological factors may account for some differences between studies; these issues, as well as alternative explanations for the findings, are discussed.

SALIVARY α -AMYLASE ACTIVITY MEASURES SNS ACTIVATION FOLLOWING HEART FAILURE SYMPTOM VERBAL REPORT

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Elevated norepinephrine in heart failure (HF) impairs calcium transients and accelerates cardiac remodeling, resulting in increased symptoms and death. Salivary α -amylase reflects serum norepinephrine levels resulting from physical and psychosocial stress. The purpose of this study was to examine salivary α -amylase as a direct measure of SNS activation in older adults reporting feelings related to HF symptoms. Salivary α -amylase levels were measured in older adults (N=60) with HF (NYHA Class II-IV) pre and post a five-minute description of their HF symptoms. The predominantly male (46), Caucasian (85%) sample had a mean age of 71.99 years (SD 9.40); mean education 14.14 years (SD 2.86), Mini-Mental State Exam mean of 29.10 (SD 1.64), and HF duration mean of 104.75 months. The Kansas City Cardiomyopathy Questionnaire overall summary score (mean= 56.65, range 1.04-95.83) evaluated symptom severity. 78.33% of the sample received a stable therapeutic dose of beta-blocking therapy. Interviews occurred 4-10 hours after awakening. Whole saliva was obtained via cotton Salavette at baseline and 20-minutes after speaking. Samples were stored at -20C until ELISA quantitative enzyme testing. Baseline salivary α -amylase mean = 54.69 pg/mL (SD 37.72), follow-up = 75.50 pg/mL (SD 47.29). Salivary α -amylase activity significantly increased over time ($t=4.31$, $p<.001$). Salivary α -amylase activity increased 63.62% reflecting SNS activation related to verbal reporting of HF symptoms even in the setting of chronic beta-blocking therapy. Future studies will utilize salivary α -amylase to evaluate the effectiveness of intervention designed to facilitate self-efficacy, quality of life, and self-care of people living with symptomatic HF.

AGE DIFFERENCES IN MOOD CONGRUENCE EFFECTS FOR WORD LISTS AND AUTOBIOGRAPHICAL MEMORY

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In previous research, this lab found that older adults showed mood congruence effects on more tasks than did younger adults during laboratory induced sad mood. In the current study, 73 USC students comprised the young adult group and 78 alumni were the older adult participants. 35 younger adults and 43 older adults were randomly assigned to sad mood induction using a movie clip followed by sad music. The remainder saw a neutral clip from the same movie, followed by neutral music. The induction produced similar changes in mood in both groups. Using a word list that roughly equated sad and neutral words on

length, frequency, and difficulty, no mood congruence effects were found. For autobiographical memories, mood congruence effects were found for older adults on memories from one week ago while younger adults showed opposing mood repair effects. Older adults reported less use of suppression as an emotion regulation strategy when in sad mood while younger adults showed more suppression. Implications for socio-emotional selectivity theory and for social cognitive theories of mood congruence will be discussed.

THE EFFECTS OF AN INTERVENTION TO IMPROVE THERAPEUTIC COMMUNICATION AMONG CERTIFIED NURSING AIDES ON NURSING HOME RESIDENTS' FACIAL AFFECT DURING MEALTIMES

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Residents' facial affect during an activity of daily living may be one indicator of their quality of life in nursing homes. The purpose of this paper is to present results from an intervention to improve certified nursing assistants' (CNAs) therapeutic communication on nursing home residents' facial affect during mealtimes. All CNAs in the study received a total of four hours of therapeutic communication training during one month. The core aspect of the intervention was a facilitator-led viewing of a DVD containing examples of real CNAs engaging in therapeutic communication techniques. Before and after the intervention, 16 unique CNA-resident dyads were videotaped during mealtimes with nursing home residents. From the videos at both pre- and post-tests, coders rated the residents' facial affect once during the beginning, middle, and end of an interaction as one of the following: alert, pleasure, neutral, non-responsive, anxiety, sadness. These six affect expressions were reduced to positive (alert, pleasure) and negative (neutral, non-responsive, anxiety, sadness) types and regressed on the intervention. Descriptive results indicate that the predominant affect state was neutral for both pre- and post-tests. Using multi-level logistic regression analyses to adjust for nesting within dyads, the odds of positive affect at post-test was twice that at pre-test ($p<.001$). These results suggest that the intervention on CNAs' therapeutic communication during mealtimes had a positive effect on residents' affect. The clinical significance and implications of these findings for nursing home residents' quality of life will be discussed.

A CONCEPTUAL FRAMEWORK OF THE EMOTIONAL LABOUR OF CARE STAFF, WORKING WITH RESIDENTS WITH DEMENTIA

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The paper examines the emotional labour undertaken by care assistants who are working with older people living in care homes, including residents with dementia. Emotional labour refers to the management of emotions in the workplace. This research provides a conceptual framework with which to better understand the emotion work of care staff, and examines how these staff could be better supported, to improve their own emotional wellbeing and also the care they provide for residents. Semi structured interviews were conducted with 36 care assistants across 5 residential care homes in the South of England. The interviews were analysed using an interpretative approach to understand the perspective of the care staff. It was found that care staff face many situations requiring high levels of emotional labour, or 'emotional challenges' when caring for residents with dementia. The situational context in which this labour was undertaken was relevant to both staff wellbeing and the quality of their care. Firstly, staff tended to conceptualise these challenges as relating to a difficult situation involving residents, or a 'challenging' resident, influencing their response. Secondly, emotional challenges were either readily understood or found to be complex, with staff relying on their understanding to guide their response. However, particularly when caring for residents with dementia, the 'correct' response could be ambiguous, undermining staff's confidence. Finally, whether the outcome for the resident was positive or not was vital to the emo-

tional wellbeing of the care staff. Implications for policy and practice relating to staff support will be discussed.

SESSION 1620 (SYMPOSIUM)

ETHICAL ISSUES IN GERIATRIC MENTAL HEALTH CARE

Chair: *M.J. Karel, Psychology, VA Boston Healthcare System, Brockton, Massachusetts, Harvard Medical School, Boston, Massachusetts*

Discussant: *T. Cole, University of Texas-Houston Health Science Center Medical School, Houston, Texas*

Clinicians and researchers who work with older adults with mental health problems face a range of potential ethical dilemmas. At the core, a frequent tension exists between respect for the older adult's autonomy and a professional obligation to protect the safety of a potentially vulnerable individual. When working with older adults whose decision making capacity is compromised by dementia or serious mental illness, the tension between these competing ethical principles can be challenging to resolve. This symposium will illustrate ethical issues in geriatric mental health care through presentation of three ethically challenging dilemmas, followed by facilitated audience discussion. The first speaker will discuss the issue of patient and surrogate consent for research participation by elders who lack decision-making capacity, sharing research on the attitudes of patients and surrogates regarding the ethics of proxy consent. The second speaker will discuss research and ethical implications of using GPS technology to monitor the location of older adults with dementia, balancing concerns about privacy and confidentiality with those for safety. The third speaker will discuss ethical issues that may arise in working with suicidal older adults. While suicide is most often viewed as a preventable outcome of depression or other medical/social concerns, suicide is viewed by some, in some circumstances, as a rational response to suffering in late life. How are autonomy and protection of safety to be balanced in these difficult situations? A medical humanist discussant will provide commentary and encourage the audience to share reactions and reflections on the material presented.

THE USE OF GPS BY PEOPLE WITH DEMENTIA AND THEIR FAMILY CAREGIVERS: ETHICAL ISSUES

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Many people with dementia get lost at some point in their illness, and a few percent get lost repeatedly. Getting lost may lead to dangerous situations for the person with dementia, may be a burden for the caregiver, and may eventually result in nursing home placement. GPS has been suggested as a way of allowing people to remain independent for longer. A satellite tracker is worn by the person with dementia. The person's movements are monitored on a map and can be seen via a secure website. The family caregiver can also be alerted by a signal if the person with dementia goes outside a specific area. In this presentation, research on using GPS technology by older adults with dementia and their family caregivers will be presented. Several ethical issues will be discussed: the decision whether or not to use GPS; restriction of the privacy of the person with dementia who will be tracked and traced; safety issues and issues of autonomy.

ADDRESSING THE ETHICAL AND POLICY CHALLENGES OF RESEARCH THAT INVOLVES OLDER ADULTS WHO CANNOT PROVIDE AN INFORMED CONSENT

J.H. Karlawish, *Medicine, University of Pennsylvania, Philadelphia, Pennsylvania*

Research that involves older adults who cannot themselves provide an informed consent because of illnesses such as dementia presents a challenge: under what conditions is it appropriate to enroll such a person into research? Proposals would sharply limit the amount of risk a person can be exposed to and also set limits on the role of a proxy deci-

sion maker. But a growing body of research suggests that these policies may not adequately align with the views of the people they are designed to protect. This talk will examine how older adults would want other people to make research decisions on their behalf. Research suggests that the concept of "leeway" and certain attitudes about biomedical research support willingness to participate. The talk will examine how these data impact on policy and how we conceptualize the principle of respect for autonomy among older adults.

PERSPECTIVES ON SUICIDE, RATIONAL SUICIDE AND HASTENED DEATH: ETHICAL ISSUES FOR MENTAL HEALTH PRACTITIONERS

A. Fiske, A. O'Riley, *Psychology, West Virginia University, Morgantown, West Virginia*

Mental health practitioners who work with older adults may be more likely than other practitioners to face ethical issues surrounding a client wishing to end life. Clinicians may need to respond to a client's expression of suicidal intent, a request for aid in dying, or a client's reported plan to hasten an imminent death. Decisions may rest on whether the client's expressed wishes to end life may be construed as rational. As public opinion and policy on these matters shift, the likelihood of a mental health practitioner facing an issue of this sort will only grow. This presentation will provide an opportunity to consider rational suicide and related issues from various perspectives. Often, the issue is framed as an ethical tradeoff between valuing the client's autonomy and valuing the client's safety. In this presentation, other perspectives will be considered.

SESSION 1625 (SYMPOSIUM)

LONGITUDINAL INTERRELATIONS BETWEEN SOCIAL SUPPORT, CONTROL BELIEFS, AND HEALTH

Chair: *F.J. Infurna, Penn State University, University Park, Pennsylvania*

Discussant: *T. Antonucci, University of Michigan, Ann Arbor, Michigan*

Lifespan psychologists have long been interested in structural relations among intraindividual changes within and between domains of functioning. As a prime example, there are rich conceptual frameworks linking age-related changes in facets of social support, sense of control, and health. The major objective of this symposium is to bring together a collection of empirical papers that examine such notions about how levels and age-related changes are interrelated across these domains. Using data from the Americans' Changing Lives Study, Infurna and Gerstorf show that profound associations between emotional support, mastery beliefs, and functional health not only exist in mean levels of functioning, but also that across-domain changes are moderately interrelated. Agrigoroaei and Lachman use nine-year longitudinal data from the national MIDUS study to show that a recipe of psychosocial and behavioral factors combined relates to minimized health declines with advancing age. Wagner and colleagues use data from the national SOEP study to empirically demonstrate that, relative to younger adults, older adults report more positive than negative reciprocity and also show more health benefit from such positive reciprocity. Sorkin and Rook report that interpersonal control strivings predict longitudinally the quality of social exchanges and such positive social exchanges were in turn relate to experiencing fewer functional limitations. The discussion by Toni Antonucci will integrate the four empirical papers, highlight how interrelationships between social support, sense of control, and health contribute to and influence lifespan development, and discuss various types of integrative research that promise further understanding of this across-domain interplay.

EXAMINING CROSS-DOMAIN LINKAGES BETWEEN EMOTIONAL SUPPORT, MASTERY, AND HEALTH

F.J. Infurna, D. Gerstorf, *Penn State University, State College, Pennsylvania*

Lifespan developmental psychology has long been interested in examining changes within and structural relations between domains of functioning. To explore cross-domain associations between facets of social support, control beliefs, and health, we applied a multivariate latent growth curve model to 4 waves of longitudinal data covering 15.5 years from the Americans' Changing Lives Study (mean age 54, range 25-96) to examine cross-domain linkages between emotional support, mastery, and health. Our results indicate profound associations between emotional support, mastery beliefs, and functional health not only exist in mean levels of functioning, but also that across-domain changes are moderately interrelated. Additionally, statistically nested model comparisons established that such cross-domain associations do not differ by groups of age, education, and gender. Our discussion highlights how integrative research examining cross-domain associations can inform conceptual models of lifespan development.

KEY PSYCHOSOCIAL AND BEHAVIORAL INGREDIENTS FOR HEALTHY AGING: SENSE OF CONTROL, SOCIAL ENGAGEMENT, AND PHYSICAL ACTIVITY

S. Agrigoroaei, M. Lachman, *Brandeis University, Waltham, Massachusetts*

There is widespread evidence for average declines in health with aging, yet there are large individual differences in the nature and patterns of change. Using a lifespan developmental approach, we consider the modifiable psychosocial and behavioral factors that could potentially account for such individual differences in changes in health. The presentation will include findings from the Midlife in the United States (MIDUS) Study, a large national longitudinal survey of adults between ages 25 and 85. With repeated measures analysis, we examined the cumulative effect of control beliefs, social engagement, and physical activity in relation to 9-year changes in health, while controlling for the effects of age, sex, education, and risk factors (large waist circumference, smoking, and alcohol problems). Results support a recipe for a combination of psychosocial and behavioral factors to minimize declines with aging, and suggest possibilities for promoting health.

AGE-DIFFERENTIAL EFFECTS OF RECIPROCITY ON HEALTH AND SOCIAL FUNCTIONING ACROSS ADULTHOOD

J. Wagner¹, G.G. Wagner², F. Lang¹, *1. Friedrich-Alexander University Erlangen-Nuremberg, Erlangen, Germany, 2. Max Planck Institute for Human Development, Berlin, Germany*

Findings in life span psychology point out differential developmental pathways of individuals of high and low resource groups. Thus, resource availability is a major factor of everyday functioning and successful aging. Our research aims at the detection of the interplay between the motive of reciprocity and indicators of health and social embeddedness. This paper explores age-differential patterns of positive and negative reciprocity and the predictive value of reciprocity regarding social integration and health status. The paper is based on a German panel study (SOEP) of 20075 individuals (age 20 to 96 years) that completed a scale on positive and negative reciprocity in 2005. Preliminary results indicated age-differential patterns and health effects of positive and negative reciprocity across adulthood. Older adults show more positive than negative reciprocity and greater benefit of such positive reciprocity as compared to younger adults. Results are discussed with respect to relationship regulation and functioning across adulthood.

THE IMPORTANCE OF INTERPERSONAL CONTROL STRIVINGS FOR CLOSE RELATIONSHIPS AND HEALTH IN LATER LIFE

D. Sorkin, K. Rook, *University of California, Irvine, Irvine, California*

People vary in the importance they ascribe to, and efforts they invest in, maintaining positive relationships with others. Research linking these interpersonal control strivings to the quality of older adults' social exchanges has yet to examine implications of such strivings for physical health. Data for this study came from the Later Life Study of Social Exchanges, a 2-year, five-wave, longitudinal survey of older adults. Participants were randomly drawn from a U.S. representative sample of non-institutionalized older adults 65 and older (N=916). Analyses that controlled for marital status and gender revealed that interpersonal control strivings were associated with more positive social exchanges over a 1-year period. In turn, companionship, a specific kind of positive social exchange, was associated with fewer functional limitations over a 1-year period. These findings suggest that older adults' control strivings in the interpersonal domain influence the quality of their social exchanges, which, in turn, influence physical functioning.

SESSION 1630 (PAPER)

MANAGEMENT AND TREATMENT FOR BETTER HEALTH

LET ME HAVE A SAY ABOUT MY CARE: CONSISTENCY OF PREFERENCES AMONG PERSONS WITH COGNITIVE IMPAIRMENT

C.J. Whitlatch, H. Menne, *Margaret Blenkner Research Institute, Benjamin Rose Institute, Cleveland, Ohio*

There is growing interest in research and practice to investigate and understand the care decision-making experiences and preferences of persons with cognitive impairment (PWCIs). Oftentimes, PWCIs feel they do not have enough information or involvement in the care decision-making process, and their family caregivers (i.e., care partners) are often unprepared and overwhelmed by the pressure to make informed decisions. Indeed, many practitioners, policy makers, and researchers regard cognitive impairment as a barrier to communicating care preferences. This presentation describes research findings based on interviews with PWCIs (n=371) and cognitively intact older persons (CIPs; n=220). Respondents were asked a variety of questions including static and fluid fact-based (e.g., date of birth and age), state-dependent (e.g., general preferences), and experience-based questions (e.g., weekly activities). Over a one-week period PWCIs and CIPs were found to answer more reliably to fact-based questions than to state-dependent and experience-based questions. Interestingly, there were no group differences for one state-dependent and one experience-based measure ($p > .20$). Results also suggest that as cognitive impairment worsens reliability decreases for fact-based questions, but remains stable for state-dependent and experience-based questions. The implication of these finding for policy makers, practitioners, and families is that PWCIs have the ability to participate actively in care planning and that their preferences remain constant over time. The findings support the utility and importance of developing interventions that improve communication between PWCIs and their caregivers throughout the progression of cognitive loss.

PREFERENCE ASSESSMENTS AS PART OF A TAILORED INTERVENTION TO MANAGE NUTRITION IN ELDERS WITH DIABETES

S. Anderson, A. Jay, M. Steers, L. Feliciano, *Psychology, University of Colorado, Colorado Springs, Colorado Springs, Colorado*

Chronic diseases are common amongst older adults and the prevalence increases with age. Type II diabetes is one of the most common chronic diseases in the U.S. affecting 1/5 elders, and thus represents an important target for intervention. Nonadherence with diet and medical

recommendations remains a challenge for all medical patients including older adults. Even with serious chronic conditions such as diabetes few elders fully adhere to treatment regimens, despite demonstrating sufficient knowledge of treatment procedures. The high prevalence of diabetes and associated medical complications in elders suggests simple education and diet recommendations may not be enough. Maintaining adequate nutrition can require a high degree of individual self-management strategies. Low income community dwelling elders need easy to manage, individually tailored interventions that consider the unique environmental factors relevant for their diet and health behaviors. Preference assessments (PA) may have utility in identifying healthy food options that appeal to the individual and can be used with a tailored intervention. Studies have shown that PA when used with tailored interventions has been effective in establishing healthy eating behaviors across a number of different populations including children with autism, adults with developmental disabilities, and in typically developing children with food refusal (i.e., picky eaters). However, the PA strategy has not been applied to managing dietary choices in older adults with diabetes. This study investigates whether the use of PA for healthy food choices (as part of a home-based consultation approach) results in better diabetes-related outcomes in low income elders with type II diabetes.

DIABETES MANAGEMENT IN LOW INCOME ELDERS: A RANDOMIZED CONTROLLED TRIAL OF SYSTEMATIC INDIVIDUALIZED INTERVENTION

M. Steers, L. Feliciano, A. Jay, S. Anderson, *Department of Psychology, University of Colorado, Colorado Springs, Colorado Springs, Colorado*

Type II diabetes is one of the most common chronic illnesses amongst older adults (OAs), affecting approximately 20% of seniors (National Diabetes Information Clearinghouse, 2008). Improperly managed diabetes detrimentally affects health (i.e., eye, circulatory, nerve, and kidney disorders) and thus represents an important target for intervention. Simple education and diet recommendations are often not enough. Treatment nonadherence is a serious concern; resistance to treatment is particularly prominent when lifestyle changes are recommended (Meichenbaum & Turk, 1987). Psychosocial interventions can improve the well-being of patients with chronic medical conditions (Fekete, Anotni, & Schneiderman, 2007), but these interventions are not always successful in part because adequate diabetes management requires a high degree of self-management strategies. Thus, in order to be successful, researchers need to approach this problem differently and consider the complexity of this disorder. The present study evaluated the effects of an innovative approach to diabetes management in community-dwelling older adults with Type II diabetes utilizing an individualized home-based consultation method (IHBC). Participants were randomized to either a psychotherapy group or IHBC. Each group met for five 90 minute weekly sessions to assist OAs in: a) proactive diabetes management, b) identifying potential barriers to effective self-care, or c) identify factors potentially relevant to home health behaviors (i.e., mobility concerns, barriers to accessing health meals/beverages). Outcome measures included the Summary of Diabetes Self-Care Activities (SDSCA) scale, the WHO-5 Well-Being Index, and the Outcome Rating Scale (ORS). Group comparisons were conducted and results will be discussed in terms of patient outcome indicators.

A MIXED METHOD ANALYSIS OF GENDER DISPARITIES IN HEALTH OUTCOMES OF OLDER ADULTS WITH DIABETES

E.J. Nicklett, J. Liang, R. Anspach, R. Halpern, *Sociology & Public Health, University of Michigan, Ann Arbor, Michigan*

OBJECTIVE: Using trajectory analysis, we aimed to (1) determine whether or not there are gender differentials health decline; and (2) examine the correlates of this relationship proposed previously in cross-sectional research, such as relationship trajectories, informal care, and

other forms of support. METHOD: We examined trajectories 14-year HRS (n=4,809 with diabetes) on health outcomes (ADLs/IADLs) with gender as well as: (a) marriage/relationship status; (b) provision and receipt of care; and (c) provision/receipt of support. We triangulated qualitative and life history calendar data from a community sample of older adults with diabetes (n=30) in the larger Detroit area to examine the causal pathways underlying gendered relationships between sex and transitional health outcomes. RESULTS: Controlling for race and age, biological sex was not significantly related to rates of decline among diabetics ($p < .05$), although the shape of trajectories differed. Triangulation with qualitative and life history calendar data provided new insight on the mechanisms. More specifically, the provision of spousal support, stressful life events, marital disruptions or disharmony, providing care to family and friends, and economic deprivation were specific concerns that were particularly prevalent among older women (relative to older men) interviewed. Protective factors included receipt of social support and informal caregiving, higher wealth and income, and supportive romantic relationships. Preliminarily, these factors appear to interact with other forms of social status, such as race/ethnicity (including immigration history) and social class. CONCLUSIONS: Trajectory analysis did not demonstrate significant differences in health outcomes between men and women; however, there are particular gendered differences in the lived experience of diabetics which relates to both regimen adherence and health outcomes. More attention—in research and policy—is needed to address these disparities as the population ages and chronic illnesses such as diabetes become increasingly prevalent.

COST-EFFECTIVENESS OF MEDICAL NUTRITION THERAPY AND MEALS FOR SENIORS WITH CARDIOVASCULAR DISEASE

J. Troyer¹, W.J. McAuley^{2,3}, M. McCutcheon², 1. *University of North Carolina at Charlotte, Charlotte, North Carolina*, 2. *George Mason University, Fairfax, Virginia*, 3. *Agency for Healthcare Research and Quality, Rockville, Maryland*

Many older people experience hyperlipidemia and hypertension, but there is little information regarding whether medical nutrition therapy (MNT) or therapeutic meals have an independent or joint beneficial impact on older people with these diagnoses. The objective of this study was to provide evidence regarding the cost-effectiveness of MNT and therapeutic meals for older adults (aged 60+) with hyperlipidemia and/or hypertension. We conducted a one-year clinical trial where 321 people were each assigned to one of four arms: (a) a literature only control group, (b) a meals only group that received seven diagnosis-appropriate therapeutic meals a week, (c) a MNT only group, and (d) a MNT plus meals group. Our outcome measure was quality adjusted life years (QALYs), which allows for the comparison of our cost-effectiveness results to a broad range of interventions. Costs included both intervention and medical costs. We used two analytical approaches: 1) estimation of separate models of costs and QALYs that facilitated the construction of incremental cost effectiveness ratios and 2) net benefit analysis which allowed us to present information regarding the probability that each intervention was cost-effective given different values for society's willingness to pay for a QALY. The point estimates for the incremental cost effectiveness ratios suggest that all interventions are cost effective, with the MNT only group being the most cost-effective. Using the net benefit approach and a willingness to pay of \$109,000 per QALY, the probability that the therapeutic meal delivery program is cost-effective is 95%, and, for MNT, the probability is 90%.

MEASUREMENT & METHODS

QUALITY OF LIFE IN INSTITUTIONAL SETTINGS: THE DEVELOPMENT OF A COMBINED RESIDENT AND CAREGIVER ASSESSMENT

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The aim of this project is to develop a multidimensional quality of life assessment for people living in institutional settings, useful for residents with and without dementia. Along 12 dimensions of life quality (based on Lawton et al., e.g., functional capacity, meaningful activity, safety, relationships, dignity, privacy), individual semi-structured face-to-face interviews are conducted to assess the resident's perspective and evaluations. Next, in a moderated session caregivers collect individual life quality issues for each resident and evaluate life quality dimensions from their perspective. Finally both perspectives are juxtaposed. Data is based on assessments from 376 residents (79.8% women; 29.8% demented) in 21 nursing homes. Mean duration of the combined assessment is 3.9h. Quantitative and qualitative analyses of about 12.000 residents' statements and evaluations of the 12 dimensions show differences due to age, gender, living duration, and dementia diagnosis. Findings shall lead to a more complex understanding of life quality in institutional settings and a better fit between the residents' and the caregivers' perspectives.

COMPARING THE PSYCHOMETRIC AND PREDICTIVE PROPERTIES OF TWO MEASURES OF WISDOM

J. Webster², M. Taylor¹, G. Bates¹, *1. Swinburne University of Technology, Melbourne, Victoria, Australia, 2. Langara College, Vancouver, British Columbia, Canada*

Two recently developed scales of wisdom were compared on their abilities to have their factor structure replicated and to predict relevant personality (i.e., forgiveness) and life satisfaction (i.e., psychological well-being) variables. One hundred and seventy-six primarily (71%) Australian participants ranging in age from 18 to 68 years ($M = 36.60$, $SD = 12.07$) completed an on-line survey of the Self-Assessed Wisdom Scale (SAWS; Webster, 2003, 2007), the Three-Dimensional Wisdom Scale (3D-WS; Ardelt, 1997, 2003), the Heartland Forgiveness Scale, Ryff's (1989) measure of psychological well-being (PWB), and a measure of social desirability. Results indicated that the factor structure of the SAWS, but not the 3D-WS, replicated, and the 3D-WS, but not the SAWS, was contaminated by a social desirability response bias. Both scales predicted equally well PWB and Forgiveness in predicted directions. Implications for future use of both scales are discussed.

LONGITUDINAL TRAJECTORIES OF SUBJECTIVE HEALTH DIFFER BY FRAME OF COMPARISON

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Research suggests that measures of subjective health are associated with important outcomes such as objective health and mortality. However, responses to self-ratings may be skewed by frames of comparison. To study age differences in such effects, we examined the influence of comparison frames on longitudinal trajectories of self-rated health in a large life-span sample drawn from the Baltimore Longitudinal Study of Aging and assessed up to 10 times over an interval of up to 18 years ($N = 2106$, age range at first assessment 17-93, $M = 55.4$, $SD = 17.6$, 54% female). To examine the relative role of social and temporal comparisons, single-item health ratings were collected under four comparison frames: Comparison to age peers, comparison to past, comparison

to future, and no frame/open-ended. In Hierarchical Linear Modeling analyses, age and age-squared were significant predictors of all four health ratings ($p < .01$). However, while open-ended ratings followed a curvilinear slope with accelerated decline in old age, social and temporal comparisons remained comparatively stable in middle and late adulthood. Gender and cohort effects were found for intercepts (e.g. women had higher expectations of future health, $p < .001$), but not for longitudinal trajectories ($p > .05$). We interpret results in the context of social and temporal comparison theories and discuss implications for assessing subjective health across the life-span.

CREATION OF USER-CENTERED REPORTS FOR PATIENTS AND MEDICAL PROFESSIONALS

J.O. Brooks¹, W.C. Logan², E. Cress³, V. Hirth⁴, R. Beeco¹, J. Gomer¹, L. Smolentzov¹, *1. Psychology, Clemson University, Clemson, South Carolina, 2. Greenville Hospital System, Greenville, South Carolina, 3. University of Georgia, Athens, Georgia, 4. Palmetto Health, Columbia, South Carolina*

Systematic approaches for presenting medical information to seniors have not been widely explored and published. Prior to incorporating a mobility and physical function measure into clinical practice, meaningful and understandable reporting formats were needed for physicians and therapists. It was important for seniors with varying educational and cognitive levels also understand the information. Testing was conducted in three phases with over 200 participants including seniors with a broad range of physical functioning, subject matter experts, and medical professionals. Focus groups and interviews evaluated prototype reports using several presentation styles, graph orientations, and levels of detail/abstraction. Cost-effectiveness and ease of incorporation into both paper and electronic medical records were also considered. The final product, while containing that same content for patients, physicians and therapists, represented three very different formats - each accommodating the specific needs of each user group. To maximize health literacy, all medical reports would benefit from user-centered design.

IS THE SENSORY ORGANIZATION TEST A RELIABLE MEASURE OF CENTRAL SENSORY FUNCTION IN ADULTS WITH FIBROMYALGIA?

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A common complaint among adults diagnosed with Fibromyalgia (FM) is postural instability and dizziness (Bennett et al., 2006). One test commonly used to evaluate sensory system impairments that are central in origin is the Sensory Organization Test (SOT). To date, however, the reliability of this test has not been investigated in a population with FM. The goal of this study was to use Generalizability Theory to determine the most effective testing protocol to obtain a reliable assessment of postural sway in various sensory conditions. Study participants included 41 females and two males, ranging in age from 40 to 78 years ($M = 58.72$, $SD = 9.89$). The six-condition SOT was administered twice on the same day by the same test administrator with a 30-minute rest interval separating the two tests. An Equilibrium Score (ES) was calculated for each of the three test trials in each condition as a measure of postural sway. The results indicated that performing the SOT twice on a single testing day was sufficient to achieve moderate-to-good (.61 to .89) reliability across the six testing conditions. Conducting a third assessment was suggested to increase the level of reliability obtained (.70 to .92). Collectively, the results indicate that a reliable evaluation of central sensory system function can be obtained in adults with FM after a minimum of two full testing sessions. Whether testing on multiple days as opposed to a single day yields higher reliability due to less fatigue remains to be determined.

MBMD TREATMENT PROGNOSTICS AND STRESS MODERATORS AMONG OLDER ADULTS WITH MILD COGNITIVE IMPAIRMENT

C.A. Yeager¹, L. Hyer², *1. Institute for Mental Health Policy, Research, and Treatment, Essex County Hospital Center, Cedar Grove, New Jersey, 2. Georgia Neurosurgical Institute, Macon, Georgia*

Objective: Memory impairment at later life in the form of Mild Cognitive Impairment (MCI) or mild dementia is problematic as, increasingly, these states cause multiple psychiatric and functional problems. In this poster we highlight one less studied aspect of these problems in older adults: personality patterns as embodied in lifestyle habits, stress moderators, and treatment prognostics. We similarly present psychiatric and coping profiles of such individuals in comparison to those who have age-typical cognitive function. **Method:** A sample of 70 individuals, referred for neuropsychological assessment because of subjective memory complaints, was identified. Patients were assessed with the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS), the Millon Behavioral Medicine Diagnostic (MBMD), as well as other measures. The majority were Caucasian, married females with at least a high school diploma. The MBMD provides information regarding psychiatric factors, stress moderators that affect coping, negative lifestyle habits, and treatment prognostics that influence treatment compliance and illness management. **Results:** 55% qualified for a designation of MCI/mild dementia. Of these, differences were noted between healthy and MCI/dementia groups in lifestyle habits (inactivity), one stress moderator (future pessimism), and one treatment prognostic (interventional fragility). In addition, the memory-impaired group had more depression, anxiety, and emotional lability. A secondary focus on personality patterns revealed differences between groups in inhibition, oppositional, and denigrated coping patterns. **Discussion:** We elaborate on the importance of treatment prognostics, lifestyle habits, and stress moderators in the context of MCI/mild dementia, especially when psychiatric conditions are implicated and illness management issues are of concern.

CLINICAL VALIDITY OF THE MINI-MENTAL STATE EXAM AND THE FULD OBJECT MEMORY EVALUATION WITH AFRICAN AMERICAN, LATINO AND CAUCASIAN OLDER ADULTS

T. Rideaux¹, S.A. Beaudreau², S. Fernandez³, R. O'Hara², *1. PGSP-Stanford PsyD Consortium, Palo Alto, California, 2. Stanford University School of Medicine, Veterans Administration Palo Alto Health Care System, and the Sierra-Pacific Mental Illness, Research, Education and Clinical Center (MIRECC), Palo Alto, California, 3. Center for Healthful Behavior Change, Department of Medicine, New York University School of Medicine, New York, California*

Rationale: Detecting dementia in older ethnic minority adults, especially those with limited education¹ can be significantly compromised using biased cognitive screens. The Mini-Mental State Examination (MMSE) is potentially biased by ethnicity and education.^{2,3,4} Some evidence, however, suggests that the Fuld Object-Memory Evaluation (FOME) may not be biased by education or ethnicity.^{5,6,7} **Objective:** To compare the validity of the FOME with the MMSE for detecting dementia in African American, Latino, and Caucasian older adults. **Participants:** Adults over 70 (613 Caucasians, 159 African Americans, 73 Latinos) enrolled in the Aging, Demographics, and Memory Study, a supplement to the Health Retirement Study. **Method and Results:** We conducted analyses for the three ethnic groups with signal detection software for iterative Receiver Operator Characteristics developed by investigators at VA Palo Alto Health Care System and Stanford University (ROC Version 4.22). We included age, education, gender and dementia screen scores. For both Caucasian and African American older adults, a combination of the MMSE and FOME provided the best sensitivity and specificity for detecting dementia. The optimal measure for Latinos was the MMSE only. None of the demographic variables significantly contributed to the validity in any ethnic group. **Conclu-**

sion: Clinicians can significantly improve the validity of a dementia screen by using a combination of the MMSE and FOME with both African American and Caucasian older adults. The FOME did not have significant incremental validity beyond the MMSE for detecting dementia in Latino older adults, thus the MMSE alone may be sufficient in this older ethnic group.

FELT RESTRICTIONS AMONG MULTI-ETHNIC COMMUNITY RESIDING ELDERS

H. Cheng, B. Gurland, M. Maurer, *Columbia University, New York, New York*

Background: We conjectured that gaining access to (accessing) choices and choosing among them is a unifying choices and choosing (c-c) process that, in a given context and with knowable influences, is necessary and sufficient for understanding health related impairments of quality of life and for rationally evaluating and assisting persons when this process is constrained or inefficient. We hypothesize that c-c model could be the underlying mechanism of QoL and link QoL with health imposed restricted activities called felt restrictions (FR). **Methods:** This is a secondary data analysis based on the Northern Manhattan Aging Project (NMAP) between 1989 and 1995. A random sample of 2030 Medicare beneficiaries were recruited who were 65 and older and lived in Manhattan, a multiethnic community. The face to face interview used the Comprehensive Assessment and Referral Evaluation (CARE). We operationalized a definition of restricted c-c based on the subjects' response to items explicitly stating that a health problem was preventing the attainment of some preferred goals and activities. More than 5 restrictions were defined as FR. **Results:** Eighteen items explicitly describing health imposed restrictions of the c-c process were found. The prevalence of FR was 29.6 % (631/2130). FR was independently associated with a variety of health conditions, life satisfaction, ADL and IADL. **Conclusion:** c-c model is a new concept that could be a final common pathway for multiple health conditions and a possible link to a hard science base and a potential outcome measure of therapeutic interventions or a potential target for improving QoL in the elderly population.

HOLLYHOCKS, BIRCHES, AND RAISED BEDS: CULTURAL CONTINUITY AND CHANGE IN ONE RETIREMENT COMMUNITY

S.A. Eisenhandler, *Sociology, University of Connecticut, Waterbury, Connecticut*

This analysis traces residential turnover in the small retirement community of Kahehtiyo. Qualitative research [2005-2009] documents the impact of residents' departures on the culture of the community. Now in its seventeenth year, Kahehtiyo has sustained its life and shaped its evolution in the gardens created by individual residents. Photographs and selected passages from interviews depict the well-being residents find in gardening and related activities. In the past two years, several residents have departed. Traditional or folk wisdom holds that 'a garden dies with its gardener.' Nonetheless, departed gardeners live on in the landscape and in social life—in a cluster of pink hollyhocks vigilantly protected from reckless mowers; in a corner of paper birches that irritate everyone but remain safe from the chainsaw year after year; in raised beds once home to an array of vegetables shared among residents in the heat of August. Such material elements of gardening are woven into stories told by residents among themselves and in conversations with new residents. Though as yet there have been no formal memorial plantings or garden benches; i.e., items commemorating a departed resident, the spirit of former residents is evident in the clear expectation that newcomers will take up gardening. Only one resident is a non-gardener. Likewise, changes are expected and have been observed: newcomers have uprooted shrubs and perennials and planted their favorites; bird feeders grace the maligned but upstanding birches; and, raised beds are filled with flowers instead of vegetables.

RECRUITMENT STRATEGIES, CHALLENGES AND YIELDS IN RESEARCH ON POST-HIP FRACTURE RECOVERY INTO COMMUNITY PARTICIPATION

C.C. Green, M. Harrod, H. Moilanen-Miller, J.A. Nasr, C. Lysack, M. Luborsky, *Wayne State University, Detroit, Michigan*

Recruitment and retention of older adults with disabilities and minorities for research poses significant challenges especially when “healthy” participants are sought. Further considerations are posed by the policies of local partner institutions and HIC/IRB regulations. This paper reports outcome yields for recruitment techniques and evaluates key strategies designed to improve recruitment in aging and disability related community-based research. Data is examined from a 4 year study comparing men with women (N=100) post-hip fracture (HF) in Detroit designed to specify the forms of desired community participation and trajectories of return to full participation after injury. A range of targeted recruitment strategies were conducted. Analysis examined stage-specific challenges and strategies and resulting relative recruitment yields by study group and background factors. Findings show: (1) yields in terms of effectiveness and costs of each source and strategies for recruitment (highest to lowest) patient pools; local media, regional media, face-to-face; (2) gender contrasts (face-to-face least effective for men); (3) ethnic factors show African Americans responded least to radio ads and most to conferences and flyers; and (4) physical condition factors (level of residual impairment, duration since HF) where volunteers with high residual impairment were gained only by ads and special pools vs. face to face. Specific recommendations for recruiting persons with disabilities are summarized. Final discussion considers implications for cost and representativeness of findings in designing studies of healthy elderly with disabilities. [Support: NIH # R01AG023572]

CONSISTENCY AND ACCURACY OF CANCER REPORTING IN THE PANEL STUDY OF INCOME DYNAMICS

A. Zajacova, J. Dowd, *University of Michigan, Ann Arbor, MI*

Self-reports of conditions and health status comprise a majority of population-level health data. Self-reports of serious conditions are viewed as particularly reliable due to their salience to the respondent. On the other hand, serious illnesses are known to be associated with social stigma, possibly leading to underreporting. We examine retrospective reports of cancer diagnoses in Panel Study of Income Dynamics, a nationally representative longitudinal survey. Cancer survivorship status and the timing of diagnosis were ascertained in four successive waves. Employing a range of analytic approaches including regression and latent growth models, we evaluate the consistency and timing accuracy of reports across waves and analyze correlates of most consistent and accurate reports. Of 978 adults who reported ever having cancer, over 27% provided inconsistent reports, defined as denying cancer occurrence after reporting ever having had cancer. Consistency was related to the type of cancer, ranging from 100% for colon cancer to 77% for cervical cancer. Women were more likely to provide inconsistent reports; other characteristics of individuals (age, race, self/proxy reporting, other primary cancer sites) did not affect reporting consistency. With regard to timing accuracy, we found evidence of heaping but no evidence of telescoping; consistent reports were significantly more accurate than inconsistent ones. The findings suggest that even life-threatening health conditions are misreported in interview surveys. This study highlights the caveats of using self-reported conditions, including underreports and timing inaccuracy. Repeated retrospective questions in longitudinal surveys such as the PSID can be useful for improving the reliability of health data.

MODELING INTRAINDIVIDUAL VARIABILITY: A COMPARISON OF DISCRETE TIME AND CONTINUOUS TIME METHODS

P.R. Deboeck, *University of Kansas, Lawrence, Kansas*

Many methods are available for modeling intraindividual change. The modeling of intraindividual variability, however, requires significant advancement in the statistical models that are being used. One prevalent approach is to incorporate an autoregressive component to describe intraindividual variability; that is, a component where some observation is caused by a previous observation. This discrete time approach differs from continuous time approaches that postulate that observations are manifestations of an ongoing, underlying process. Oud & Jansen (2000) have shown that a discrete time autoregressive model can be written as a continuous time model. By doing so, one should be able to estimate relationships that are independent of the sampling rate. This paper examines the modeling of affect data from the Notre Dame Longitudinal Study on Aging using both discrete and continuous time methods. The discrete time model includes the application of an autoregressive model to intraindividual data that has been altered to mimic differing sampling rates. As is to be expected, differing parameter estimates occur, corresponding to the changes in sampling rate. A continuous time method is then considered (Continuous Time State Equation, Oud & Jansen, 2000). These analyses serve as an example of the conflicts that may occur in the literature due to the combination of differing sampling rates and discrete time methods. The analyses also demonstrate the estimation of relationships using a continuous time method, which are less dependent on the rate at which individuals are sampled.

AN EXAMINATION OF THE SENSITIVITY OF THE ACTIVITIES-SPECIFIC BALANCE CONFIDENCE (ABC) SCALE

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Falls and fall-related psychological concerns significantly impact the quality of life of aging adults. Fall-related psychological surveys provide useful outcomes for fall prevention programs, thus the need to examine the psychometric properties of these instruments. Sensitivity to change is an important, yet understudied psychometric property (Jorstad et al., 2005). The purpose of the study was to test the sensitivity to change of the Activities-specific Balance Confidence (ABC) Scale (Powell & Myers, 1995) in fallers and non-fallers. Twenty-two older adults (M age = 74.2 years, SD = 11.3) participated in two falls risk screenings over a 12-month period. Participants completed the ABC that assesses confidence in the ability to maintain balance when performing activities of daily living. History of falls within the last 12 months was determined using the Comprehensive Falls Risk Screening Instrument (Fabre, 2009). Mann-Whitney U tests revealed no significant group differences in ABC scores at time 1 based on falling status at time 2, $U = 50.0$, $p = .89$, and no significant differences in ABC change scores between fallers and non-fallers at time 2, $U = 45.0$, $p = .52$. Although these results indicate that the ABC is not sensitive to change in a community-based setting, lack of statistical power and the inability to control for falling status at time 1 limit the confidence of these findings. Further testing of the sensitivity of the ABC and other fall-related psychological instruments is warranted because of the importance of using these instruments to determine the efficacy of falls prevention interventions.

FACTORIAL INVARIANCE OF THE BRIEF COPE ACROSS POVERTY LEVEL

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The Brief COPE (Carver, 1997), derived from the original COPE Inventory (Carver et al., 1989), is a widely used measure of coping skills in the aging literature. A review of the literature reveals that the Brief COPE is utilized with individuals from a broad socioeconomic range (e.g., Stein et al., 2008). As such, the present study investigated the factorial invariance (FI) of the Brief COPE for individuals above ($n=956$) and below ($n=883$) the poverty level, using the factor structure found in a previous exploratory factor analysis (Carr et al., 2008). Participants included 1839 community-dwelling African American ($n=1104$) and White ($n=735$) adults aged 30–64 years ($M=47.96$, $SD=9.135$) from the National Institute on Aging's Healthy Aging in Neighborhoods of Diversity across the Life Span study. The evaluation of factorial invariance involved testing a nested sequence of increasingly stringent models (Meredith, 1993). A comparison of the configural invariance model to the weak invariance model was non-significant, $\Delta\chi^2(9, N=1839)=11.318$, $p=.25$, indicating that factor loadings for the Brief COPE were equal across poverty level. However, the comparison of the weak and strong invariance models was significant, indicating inequality of observed means across poverty level. The relative fit indices for the weak factorial invariance model indicated an adequate fit to the data (e.g., RMSEA=.062). The identification of weak factorial invariance in this study allows valid comparison of factors scores in the Brief COPE to be made (Liang, 2002) when comparing individuals below and above the poverty level.

IS RETIREMENT HEALTH A LAUGHING MATTER? UNDERSTANDING THE MODERATING EFFECT OF HUMOR

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This research assessed the extent to which humor moderates the relationship between retirement stress, including hassles, and health. Two hundred sixty-five retirees over the age of 55 years completed the SF-36, Humor Styles Questionnaire, Perceived Stress in Retirement Scale, and the Daily Hassles Scale. The stress moderating effect of humor was examined via regression analyses. Results revealed two contexts that affect the "adaptiveness" of a humor style—gender and level of stress/hassles (high or low). For example, for males, the regression of Pain on Retirement Stress at varying levels of Self-defeating humor was significant at $F = 5.139$, $p = .002$, and the Stress \times Humor interaction was significant at $t = 2.049$, $p = .042$. Although labeled a maladaptive humor style, Self-defeating humor only appeared maladaptive when stress was low. However, when stress was high a higher Self-defeating score was related to more optimal outcomes along the Pain measure, and appeared to be adaptive for male retirees. For females, the regression of Role Limitations due to Emotional Problems on Hassles Intensity on varying levels of Self-defeating humor was significant at $F = 8.644$, $p < .001$ and the interaction Hassles \times Humor was significant at $t = -3.000$, $p = .003$. Unlike with males, during low hassles, high Self-defeating humor appeared to be somewhat adaptive, and related to less Role Limitations. However, during high hassles, high Self-defeating humor appeared maladaptive and related to more Role Limitations for female retirees. These relationships were found across other health outcomes as well.

EXAMINING THE LONGITUDINAL RELATIONSHIP BETWEEN SOCIAL CONTROL AND WELL-BEING

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The goal of the present study was to examine the relationship between perceived social control and well-being in a sample of 37 widows (M

age = 73) between 3 and 5 years post-loss. Measurements on perceived social control, depression, and life satisfaction were taken as part of a longer longitudinal study 3 years after women lost their husbands and predictions were made about outcomes at year 5. Participants were married an average of 46 years and 75% of the sample was in their first marriage. Regression analyses demonstrated that perceived social control measured at T1 (3 years post-loss) was significantly predictive of both depression and life satisfaction at T2 (4 years post-loss) after controlling for T1 outcomes. More specifically, the model for depression accounted for 36% of the variance and included a beta weight of $-.34$ ($p < .05$) between T1 control and T2 depression. Similarly, the model for life satisfaction accounted for 38% of the variance and included a beta weight of $.38$ ($p < .05$) between T1 control and T2 life satisfaction. Understanding the longitudinal relationship between various protective mechanisms and well-being outcomes brings us one step closer to assisting helping professionals understand the process between coping with the loss of a spouse.

FOOD PREFERENCES IN MIDDLE-AGED, YOUNG-OLD AND OLDEST-OLD ADULTS

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Lifestyle factors, including food preferences and dietary practices, have been shown to influence health outcomes in later life. In the present research, we examine self-reported food preferences and dietary habits in sample of adults who range in age from 45 to over 90 years of age. The objectives of the proposed study are to: (1) describe favorite foods; (2) explore age differences in food preferences. These data were collected as part of the Louisiana Healthy Aging Study (LHAS), a multidisciplinary study that examines the determinants of healthy aging. Participants were 160 community-dwelling adults (Cherry, Hawley, Jackson, Volaufova, Su, & Jazwinski, 2008). As a part of the standard protocol, the participants describe their favorite foods during a two-minute interval. These data have been grouped into their respective food categories based on the United States Department of Agriculture: My Pyramid (food pyramid). Descriptive statistics indicated that the food group with the most favorite foods was meats; 89.5% of the participants indicated at least one meat among their favorite foods. Age group differences were apparent in meats and combination foods; in both instances, more younger participants reported preferring meats and combination foods than older participants. Implications of these results for current views of successful aging and the dynamic relationship between food preferences and health outcomes will be discussed.

GROCERY SHOPPING HABITS OF COMMUNITY DWELLING OLDER ADULTS

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The home environment provides the major portion of food and beverages available to individuals (Carlson, Kinsey & Nadav, 2002). While nutrition plays a role in the poor health of older adults, the food shopping environment has been identified as one of the negative factors that influence the nutritional status of older adults (Moore & Diez Roux, 2006). The purpose of this study was two-fold: 1) to identify general food shopping behaviors of older adults and 2) to identify factors that influence food choice in older adults. Snowball sampling was used to interview 26 older adults, 65 years old and older who grocery shopped and prepared their own meals. Interviews were transcribed and coded for thematic analysis. The four themes discovered in the analysis were older adults planned their meals based on prepared lists and specials in advertisements and also planned for impulse buys. Older adults' shopped for foods based on their habitual and unconsciously ongoing food preferences rather than nutritional considerations. Habitual patterns were

found as participants showed loyalty to one store, followed the same path around the store, and purchased similar items each time they grocery shopped. Older adults indicated they looked at nutrition labels; however nutrition was not as important as price when they chose a food item. Educators need to focus on creating older adults' need for nutrition education by promoting the importance of adequate nutrition knowledge for their health and the positive impacts of nutritionally conscious food shopping on their health.

SESSION 1640 (SYMPOSIUM)

NEW DIRECTIONS IN CAREGIVING RESEARCH: THE PERCEPTIONS OF CARE RECIPIENTS

Chair: *S.M. Moorman, Boston College, Boston, Massachusetts, University of Wisconsin, Madison, Wisconsin*

Discussant: *K.M. Bennett, University of Liverpool, Liverpool, United Kingdom*

While the bulk of the caregiving literature addresses the experiences of informal care providers, this symposium focuses on the experiences of persons who receive care. We examine the emotions, expectations, preferences, and choices of older persons as they progress from healthy persons anticipating future care needs to terminally ill persons preparing for death. Moorman addresses the relationship of objective and subjective problems to the level of concern that healthy older adults hold about burdening caregivers in future. Crist explores older Mexican Americans' preferences for informal over formal care services. Bodnar-Deren investigates the reasons seriously ill persons give for the presence and content of end-of-life medical care plans. Egbert studies the mental health of stroke survivors as they adapt to their new roles as care recipients. Schroepfer examines the social support that terminally ill persons expect to receive in their last months and following their deaths. Across our studies, themes include autonomy, concerns about burdening caregivers, and acceptance of caregivers' imperfections. Care recipients wish to preserve their independence to the extent possible. They experience guilt and depression over their care needs, and work to protect their caregivers from burden. They prefer informal care, but are aware that their caregivers may lack nursing skills and may offer unhelpful social support. Overall, our studies suggest that older adults are active participants in the caregiving relationship. We propose directions for future research as well as best practices for health care professionals working with older patients and their caregivers.

HEALTHY OLDER ADULTS' CONCERN ABOUT BURDENING FUTURE CAREGIVERS: A GENDERED APPROACH

S.M. Moorman, 1. Boston College, Boston, Massachusetts, 2. University of Wisconsin-Madison, Madison, Wisconsin

A majority of recipients of informal health care express concern that their caregivers are burdened. Although many care recipients experience depression, suicidal ideation, and other forms of psychological distress as a result of their concern, little research has examined the sources of perceived burden. Because care work experiences differ by sex across the life course, I study perceived burden as a gendered issue. In a sample of nearly 10,000 White adults in their mid-60s who are anticipating their future care needs, I find that women perceive more burden than do men. Subjective concerns, such as personal autonomy, are the major sources of perceived burden, presumably because care recipients wish to protect caregivers' independence. Although norms of reciprocity dictate equal exchange, objective concerns such as finances contribute little to perceived burden. Interventions should address subjective concerns, especially among women, in order to improve the psychological well-being of care recipients.

KEEPING IT IN THE FAMILY: WHEN MEXICAN AMERICAN ELDERS CHOOSE NOT TO USE HOME CARE SERVICES

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BACKGROUND: Mexican American elders are more functionally impaired and chronically ill, yet use home care services less than Anglo elders. **PURPOSE:** Describe the process by which Mexican American elders and their caregivers decide not to use home care services. **METHODOLOGY:** Grounded theory's constant comparison was used to analyze Mexican American elders' (N=11) and family caregivers' (N=12) interviews. **FINDINGS:** The emerging substantive grounded theory included three stages: Taking Care of our Ourselves, Acknowledging Increasing Needs, Tapping Family Resources. The processes describe how Mexican American families face increasing needs of elders at home in the context of their cultural norm of familism. **DISCUSSION:** Findings were similar to those by elders who chose to use home care services and can shape interdisciplinary interventions to support traditional Mexican American family values, including elders' aging in place. Increased understanding will contribute to the national agenda to reduce health care disparities.

UNDERSTANDING PATIENTS' PERSPECTIVES ON END-OF-LIFE HEALTH CARE PLANNING

S. Bodnar-Deren, Sociology and Institute for Health, Rutgers University, New Brunswick, New Jersey

Much of the research on End-of-Life (EOL) planning has focused on objective measures of patients' planning rather than patient self-appraisal/perception, and relatively little is known about how patients' perceptions operate in terms of informing EOL planning. The purpose of this study is to explore how patients' perceptions affect their EOL planning. Audio-taped focus groups (N=75) were conducted to explore self-perceptions among cancer, CHF, and diabetes patients. Content analysis revealed five major themes: self-perceived burden was a major factor in EOL planning, patients reported that being able to control/direct their care at the end of life was important, as was the desire to prevent family conflict. Similarly, issues regarding autonomy and dignity factored into individuals' EOL planning behaviors. These themes broaden what we know about EOL planning, serve to guide health professionals, and suggest that by eliciting patient perceptions about illness impact, practitioners may better facilitate increased levels of EOL planning.

EXPLORING THE RELATIONSHIP BETWEEN CARE RECIPIENT PWB AND PERCEPTIONS OF SELF AND STRAIN WITHIN THE CAREGIVING CONTEXT

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Although it is well-established that the psychological well-being (PWB) of family caregivers is related to perceived self and strain in the caregiving role, scant research has explored if the PWB of care recipients is similarly linked to their perceptions of roles and self within the caregiving context. We analyzed self-reported baseline data from 14 male stroke survivors with elevated depression or anxiety recruited for a randomized clinical trial of an intervention for spousal caregivers. Depression correlated positively with perceived dependency (.57), and inversely with perceived quality of care (-.52) and social support (-.49). Anxiety correlated inversely with perceived quality of care (-.55) and overprotection (-.37). Although self-reported mastery was weakly related to depression and anxiety, it correlated highly with both perceived dependency (-.43) and emotional support (.44). These exploratory findings suggest that the PWB of care receivers is strongly associated with how they view interacting with caregivers [Funded by R21NR010189-01A1].

TERMINALLY ILL ELDER'S ANTICIPATION OF SOCIAL SUPPORT IN DYING AND AFTER DEATH

T. Schroepfer, H. Noh, *School of Social Work, University of Wisconsin-Madison, Madison, Wisconsin*

Social support has been found to play a key role in the dying process of terminally ill elders; however, scant information is available regarding the type of support these elders receive and prefer. The purpose of this study was to ask elders who had less than six months to live about their support. In-depth, audiotaped face-to-face interviews were conducted with 100 terminally ill elders and data were content analyzed to identify and categorize the main themes. Although not asked specifically about anticipated support, preliminary findings revealed that 85 of the 100 elders identified such support as important. Four themes emerged: 1) reasons for anticipating support from others, 2) feelings of guilt about anticipating support, 3) anticipating both helpful and unhelpful support, and 4) support anticipated both in dying and after death. These research findings have implications for those seeking to provide appropriate support to an elder in his/her dying process.

SESSION 1645 (SYMPOSIUM)

NEW INSIGHTS IN LIFE REVIEW: FROM THEORY TO THERAPY

Chair: G.J. Westerhof, *Psychology and Communication of Health and Risk, University Twente, Enschede, Netherlands*

Discussant: P. Cappeliez, *University of Ottawa, Ottawa, Ontario, Canada*

Reminiscence and life review have a long tradition in gerontology, but the link between research and applications has been rather weak. This led us to conduct a systematic review of scholarly publications relating reminiscence and life review to mental health. We found three basic functions: social functions include the exchange of positive memories in social interactions; negative functions relate to the use of positive memories to reduce boredom and to the continuous revival of bitter memories; positive functions include the integration of both positive and negative memories into one's present life and identity. In this symposium, we draw implications from this research for interventions, focusing in particular on the use of life review in psychotherapy. First, we present a new classification of interventions based on reminiscence functions. Life review therapy is added as a new type of intervention besides simple reminiscence and structured life review. This classification also makes it possible to formulate more precisely why certain interventions will be effective in promoting particular aspects of mental health. Second, we assessed reminiscence functions in people with symptoms of depression and anxiety. Reminiscence is systematically related to mental health problems in this population, showing that it is important to address reminiscence functions in psychotherapy offered to this group. Third, an RCT of an intervention combining life review with creative therapy is presented. The program is found to be effective in promoting personal meaning and thereby in alleviating depression. The study provides evidence of the importance of integrating life review in psychotherapy.

THE EFFECTS OF LIFE REVIEW THERAPY ON PERSONAL MEANING AND DEPRESSION

G.J. Westerhof¹, E.T. Bohlmeijer¹, A. Pot^{2,3}, 1. *Psychology and Communication of Health and Risk, University Twente, Enschede, Netherlands*, 2. *Free University, Amsterdam, Netherlands*, 3. *Trimbos Institute, Utrecht, Netherlands*

An intervention based on life review and creative therapy was developed to increase personal meaning and decrease depression by the integration of positive and negative recollections of one's life. A multicenter RCT was conducted with an intervention group (N=73) and a control group (N=67). Measurements took place before and after the intervention and three months later using a sentence completion questionnaire for personal meaning and the CES-D for depression. The inter-

vention group increased significantly more in personal meaning than the control group and remained stable at follow-up. Baseline personal meaning and improvements in meaning during the intervention predicted decline in depressive symptoms later in time. Personal meaning is a positive asset in the lives of older people that can be supported by means of life review therapy. The focus of the intervention on the promotion of meaning in life contributes to the mental health of the older participants.

NEW DEVELOPMENTS IN RESEARCH ON REMINISCENCE AND LIFE REVIEW IN RELATION TO MENTAL HEALTH: A SYSTEMATIC REVIEW

E.T. Bohlmeijer, G.J. Westerhof, *Psychology and Communication of Health and Risk, University Twente, Enschede, Netherlands*

Life-review is used to treat depression in later life, but its evidence is contradictory. Therefore, recent research on reminiscence and life-review and their relation to mental health was systematically reviewed (period 1990 – 2008). Three basic functions of reminiscence and life review were found for mental health: social, positive, and negative functions. It is proposed that these functions are addressed in different types of interventions: simple reminiscence stimulates social functions to promote positive feelings, life review uses positive functions to enhance personal well-being, and life review therapy is directed at change in negative functions to alleviate symptoms of mental illness. The distinction between life-review and life-review therapy is new and offers a possible explanation for the inconsistent results of effect studies. It is concluded that it is relevant to distinguish between different reminiscence functions and the ways in which interventions use these functions to promote different aspects of mental health.

REMINISCENCE FUNCTIONS AND MENTAL HEALTH IN OLDER ADULTS WITH MODERATE DEPRESSION

J. Korte¹, E.T. Bohlmeijer¹, G.J. Westerhof¹, A. Pot^{2,3}, 1. *Psychology and Communication of Health and Risk, University of Twente, Enschede, Netherlands*, 2. *Free University, Amsterdam, Netherlands*, 3. *Trimbos, Utrecht, Netherlands*

Since moderate depression and anxiety are by far the most important risk factors of late-life clinical disorder, it is relevant to study the functions of reminiscence in this group at risk. We assessed positive reminiscence functions (identity, problem solving) and negative reminiscence functions (bitterness revival, boredom reduction) in 171 Dutch older people with depressive symptomatology. Furthermore, we measured depressive and anxiety symptoms, important life-events and serious illness. Depression was positively correlated with negative reminiscence functions, in particular with bitterness revival. Anxiety has a positive relation with negative functions, as well as a negative relation with problem solving. Moreover, problem solving mediates the relation of negative life events with anxiety. To reduce clinical symptomatology and prevent mental disorder, we advise mental health care professionals to use techniques which reduce bitterness revival in people with depressive symptoms, and to use problem solving techniques in people with anxiety symptoms.

SESSION TEMP (SYMPOSIUM)

THE EXPLORATION OF DEEP SPIRITUALITY: MEANING MAKING AT THE END OF LIFE

Chair: L.K. Manning, *Sociology/Gerontology, Miami University, Oxford, Ohio*

Discussant: R.C. Atchley, *Sociology/Gerontology, Miami University, Oxford, Ohio*

Spirituality is a commonly used term that permeates popular culture. It is a term used by many to describe religious world-view and understanding of life experience, while for others it reflects an indescribable state of being having little to do with religiosity. Spirituality has been

described as an inner, experiential domain that can include experiences of religion and religious social contexts but is not restricted to such experiences (Atchley, 2009). Spiritual experience can occur at many levels: physical, cognitive, emotional, and transpersonal; it can be both transcendent and immanent, transcending worldly concerns, as well as intense present moment perceptions that ground all beings. In this symposium, we bring together spirituality and thanatology, exploring the deep spiritual meanings of death practices at the end of life for elders in variety or spiritual and social contexts. We will discuss death from a variety of spiritual and religious perspectives, exploring the essence of spirituality and the implications it has on meaning making at end of life.

ASSESSING THE CONNECTION OF SOUL (COS) WITH A TRANSCENDENTAL WORLD FOR DEATH AND DYING STUDIES: REFLECTING THE WORLD'S MAJOR CULTURAL TRADITIONS

A.L. Ai, H. Kanno, *University of Pittsburgh School of Social Work, Pittsburgh, Pennsylvania*

In line with the global population aging, death and dying has become an increasingly important topic in research area. Contrary to the general expectation, the association between religious factors and death anxiety is mixed in meta-analyses. This inconsistency led to the question about religious instruments used and the suggestion for measuring belief in an afterlife. Accordingly, we developed a new scale, the Connection of Soul (COS) in a transcendental world. Beliefs in soul can be traced back long before the emergence of today's major religions. In the word's history, fantasy about an afterlife has been widely spread, manifested in myths and cultural views. Based on Smart's "Great Three" origins, our study generated and verified the three-dimensional COS, Secular, God-centered, and Cosmic-spiritual Views, reflecting the cultural value in ancient East, West, and South cultural legacies. Further analyses offered psychometric properties of the COS. Two faith-related views are protective against existential terror.

TIBETAN VIEWS AND PRACTICES AROUND DYING

M.D. Frank, *Social Work, Minnesota State University Mankato, Mankato, Minnesota*

Death is certain; the time of death is uncertain. Tibetan elders believe in rebirth and that actions and practices in this lifetime impact the next life. In the Tibetan Buddhist tradition, contemplation and meditation on death and impermanence helps one realize how precious and short this human life, and provides opportunities for the practitioner to become familiar with the stages of dying, allowing one to die in a peaceful and relaxed way. The Dalai Lama's advice on "living well and dying consciously" (2003) and practices that can be used each day, at the time of death, and by others during the forty days immediately following death will be discussed. Results from qualitative inquiry with Tibetan monks in Nepal and the U. S. will be presented along with results from conversations with Tibetan elders.

SERIOUS ILLNESS AND THE SEARCH FOR MEANING AMONG AFRICAN AMERICAN ELDERS WITH ADVANCED HEART FAILURE

F.P. Hopp¹, N. Thornton¹, L. Martin², *1. Wayne State University School of Social Work, Detroit, Michigan, 2. Wayne State University Department of Anthropology, Detroit, MI, Michigan*

Purpose: This study was designed to explore the lived experience of advanced heart failure among urban African American elders. Method: Focus groups and individual patient interviews were conducted among African Americans age 60 and over with advanced heart failure living in Detroit, Michigan, and the resulting qualitative data was analyzed for relevant themes. Results: The theme of life disruption encompassed the process of losing awareness, getting scared, attempts to make sense of heart failure, and limiting activities. Resuming life was a contrasting theme involving culturally relevant coping strategies aimed at re-gain-

ing and maintaining a sense of self amidst serious illness. Spiritual-focused coping included the quest for deeper spirituality and meaning, praise, gratitude, acceptance, and acknowledgment of spiritual dependence. Conclusion: African Americans with heart failure face many challenges, and frequently invoke spiritual coping to make sense of their condition and maintain a sense of self amidst the challenges of advanced illness.

SESSION 1655 (SYMPOSIUM)

TRUST, NEIGHBORHOODS, AND THE OLDER PERSON: TRANSLATING RESEARCH INTO PRACTICE

Chair: A. Glicksman, *Planning, Phila Corporation for Aging, Philadelphia, Pennsylvania*

Discussant: K. Clark, *Planning, Phila Corporation for Aging, Philadelphia, Pennsylvania*

Trust is a critical element in maintaining any social organization, from a small group to entire societies. Trust is also critical for individual well being. The lack of trust and feeling of isolation contributes to the decline of both physical and mental health. This panel looks at trust and the implications of trust in, or the lack of trust in, the health care system for the well being of older persons. Three papers (Norstrand, Hoffman, and Glicksman) investigate this issue through secondary analyses of a representative probability sample of older persons living in the City of Philadelphia and the four surrounding counties. Each paper looks at the issue of trust through a different prism – urban/suburban differences (Hoffman), trust in neighbors (Norstrand) and religious and ethnic differences (Glicksman) with a focus on how trust in the health care system relates to compliance with recommendations for regular cancer screenings. The fourth paper (Eichwald) reports on efforts to encourage older adults to be screened for cancer and ties the findings from the three analytic papers into the experience of promoting healthy behaviors. Finally, the respondent (Clark) will discuss implications of the findings and the experience of health promotion for building greater trust across all age groups in the city. Persons attending the session will be able to 1) identify three ways that trust can be built among older city dwellers and 2) describe at least two reasons that older persons sometime mistrust the health care system.

TRUST AND THE OLDER ADULT: TRANSLATING RESEARCH INTO PRACTICE

B. Eichwald, D. Nevison, *Planning, Phila Corporation for Aging, Philadelphia, Pennsylvania*

The Planning Department at Philadelphia Corporation for Aging is involved in supporting several health promotion programs including ones designed to encourage elders to be screened for cancer and programs designed for non-English speaking audiences as well as programs to assist older persons to remain in their homes and neighborhoods. Data from our research program are used by the Planning Department to help design and structure evaluations of some of these programs. Specific examples of the interface between research and planning will be examined. These include 1) evaluating neighborhood level programs to maintain elders in their homes 2) developing a breast cancer screening program and 3) assisting in identifying specific goals for other efforts to make the city more "senior friendly." The process by which the research data is integrated into the planning process will be described.

THE ROLE OF URBAN RESIDENCE IN TRUST OF THE HEALTH CARE SYSTEM

C. Hoffman¹, A. Glicksman¹, M.H. Kleban², *1. Philadelphia Corporation For Aging, Philadelphia, Pennsylvania, 2. Madlyn & Leonard Abramson Center for Jewish Life, Horsham, Pennsylvania*

Recognition of the impact of environment on behavior and feelings is growing. In this paper, regression analyses were used to explore relationships between medical mistrust and urban or suburban dwelling,

age, income and minority status. For Respondents age 60 and older, residing in a city (Philadelphia or Chester, PA) was predictive of distrust of the medical system. This was observed for 6 of the 9 healthcare trust items in the 2008 Public Health Management Corporation community survey. The medical mistrust questions encompassed several dimensions (i.e. benefits of the system; greed; racial equality of care; experimentation on patients). The mistrust items regarding medical errors did not show a distinction between urban and suburban. In examining possible implications of medical distrust, urban versus suburban residence did not bear upon the likelihood of undergoing various cancer screenings at their recommended frequencies.

RELIGIOUS AND RACIAL DIMENSIONS OF TRUST AMONG OLDER ADULTS

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Two widely held assumptions were tested, one, that religious affiliation and two, that being white, are associated with higher trust in the health care system and positive health behaviors. We compared responses of white versus Black respondents to questions about trust in the health care system and about compliance for cancer screenings within the recommended time. We then restricted the sample to white respondents and compared Protestant, Catholic and Jewish responses to the same questions splitting all analyses by gender. Jewish women and Black women were more likely to be distrustful of the health care system than members of the other groups but were more likely to have completed cancer screenings within the recommended time. These findings indicate that the role of religious affiliation and of ethnic/racial membership as they relate to trust in the health care system and health behaviors is much more complex than often described.

HOW DOES THE SOCIAL ENVIRONMENT IMPACT TRUST IN THE HEALTHCARE SYSTEM AMONG OLDER ADULTS?

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Introduction: Social environment is significantly associated with health (McNeill et al., 2006). Goal: Study examined whether social environment (measured by perception of neighborhood, PON) is associated with trust in healthcare system and following medical advice. Method: Community health survey collected in 2008 by Public Health Management Corporation provided sample of 3,257 elderly (60 years and over) living in Southeastern Pennsylvania. Multiple regression analyses were carried out for positive and negative trust in healthcare system and following medical advice. Socio-demographic and health predictors were entered in first and second steps respectively, and PON in final step. Results: PON was significant predictor of trust in healthcare system. Models were statistically significant for positive trust: $F(7, 2174) = 19.02, p < .001$ and negative trust: $F(7, 1797) = 19.53, p < .001$. PON did not predict following medical advice. Conclusions: Social environment of older adults may play key role in how older adults relate to healthcare system.

SESSION 1660 (PAPER)

WORKING IN A NURSING HOME

A NATIONAL OVERVIEW OF THE TRAINING RECEIVED BY NURSING ASSISTANTS WORKING IN U.S. NURSING HOMES

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Adequate training is critical to meet long-term care (LTC) direct care workforce retention challenges. Yet, little is known about the adequacy of initial training and continuing education received by LTC direct care workers. A few geographically limited studies have indicated that training of direct care workers is often insufficient. Using the first-ever nationally representative sample of nursing assistants (NAs) from the 2004 National Nursing Assistant Survey (NNAS), this descriptive paper provides an overview of the initial training and continuing education received by NAs working in nursing homes, assesses NAs' perceptions of the adequacy of their training, and identifies unmet training needs. Chi-squares are used to examine associations between NAs' job satisfaction and NAs' perceptions about the adequacy of training. Results show that overall about 66 percent of NAs feel that their initial training prepared them well for their jobs. However, there is wide variation in the perceived adequacy of initial training in specific skills: less than half of NAs feel that their initial training provided them with excellent preparation to work with dementia patients, while over 70 percent thought that they had excellent preparation for handling residents' needs for assistance in activities of daily living (ADLs). Nearly 90 percent attended continuing education classes. Job satisfaction varied significantly by NAs' perceived adequacy of training: a higher percent of aides who rated their training as excellent were satisfied with their jobs. Findings could inform enhancements to NAs' initial training as one approach to help address retention challenges for this essential labor force.

PRACTICE VARIATION AMONG NURSING HOMES THAT PERCEIVE THEMSELVES AS MOSTLY AND COMPLETELY CULTURE CHANGE FACILITIES

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The culture change (CC) movement aims to transform nursing homes (NHs), that often restrict resident/staff autonomy by empowering resident/frontline staff. However, little is known about the transition process to becoming a CC home, including whether this process differs between NHs perceiving themselves as "mostly" vs. "completely" CC facilities. Using data from a 2007 Commonwealth-funded study, we examined 291 NHs self-reporting as being "mostly" or "completely" CC facilities, and used complexity theory to help inform our thinking. Using descriptive statistics we examined prevalence of practices by extent of CC and years implementing (1-3 versus 3+). Practice categories included resident-centered care and staff empowerment. Empirically, differences across years of implementation were greater among "completely" NHs. Among "mostly" CC homes, only two of sixteen practices showed differences across time categories, but for "completely" NHs, ten of sixteen practices showed significant differences. For example, having self-managed work teams was unchanged for "mostly" NHs (26%-27%), but a greater proportion of NHs self-identified as "completely" and implementing CC for 3+ versus 1-3 years had such teams (49% versus 30% respectively). NHs with 3+ versus 1-3 years of implementation had higher turnover in "mostly" CC-NHs and lower turnover in "completely" CC-NHs. Findings suggest tangible distinctions between NHs self-identified as "mostly" and "completely" CC facilities. "Completely" NHs may have a philosophical mission to become a total CC facility, and thus continually implement new practices. Facilities without this mission, after adopting some practices, may stop CC improvement efforts, indicated by little variation based on when adoption occurred.

PREDICTORS OF SATISFACTION WITH SUPERVISION FOR NURSES IN LONG TERM CARE SETTINGS

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There has been little research on the supervisory needs of nurses in long term care compared to acute care settings. This study addresses the literature gap by examining predictors of satisfaction with supervision in a sample of 136 RNs and LPNs working in 49 nursing homes, assisted living facilities, and home care agencies in northeast Ohio. The research is based on the stress and support model with four categories of predictor variables (background characteristics, personal stressors, job-related stressors, and social support in the workplace) to explain satisfaction with supervision. Regression analysis showed the background characteristics category was not significant and was dropped. The remaining categories each made a significant contribution with an adjusted R² of .26 ($p=.000$). While the category of personal stressors was significant, there were no individual variables in the category that emerged. The significant predictors were from the job-related stress and social support categories: satisfaction with paid health insurance, opportunities for promotion, and reports of more positive and less negative support in the workplace. Management efforts to improve nurses' satisfaction with supervision can be addressed through improved health insurance plans and career ladders for nurses and attention to the work environment's socio-emotional milieu.

THE UNCONSCIOUS AND UNRESTRAINED MONITORING SYSTEM AND ITS INFLUENCE ON THE CARE STAFF AND THE INSTITUTIONALIZED ELDERLY PERSONS

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The aim of this study was to clarify how the introduction of an unconscious and unrestrained 24-hour monitoring system in a nursing home affected the physical and mental functions of care staffs, and ADL in elderly persons requiring long-term care. This system was composed of an air pressure sensor system and an ultrasonic oscillosensor system. The intervened participants were seven care staffs (age 37.4 \pm 14.2) and seventeen elderly persons (age 85.1 \pm 9.2) in a nursing home, Osaka, Japan. We selected the control group consisting of seven care staff (39.0 \pm 15.8) and eighteen elderly persons (age 86.8 \pm 9.2) in the same facility. We carried out a baseline survey at the end of September 2008, and the follow-up study was done at the end of October 2008. We evaluated care staff's physical and mental functions using the questionnaires such as cumulative fatigue symptoms, job stress, Maslach Burnout Inventory etc. Step counts, and total and each energy expenditures of care staffs during a night shift work were assessed by using a pedometer calorimeter. From the comparisons of the average scores of measurements between pre- and post-intervention using generalized linear model, the scores of "energy expenditure during diaper changing", "the counts of diaper changing", "decreasing of work incentives", and "conflict with their chief" significantly decreased in the intervention group ($P<0.01$, $P<0.05$). These results suggest that the introduction of the 24-hour monitoring system in the nursing home could decrease care burden of the care staffs and improve ADL and QOL of the elderly persons requiring long-term care.

SESSION 1665 (PAPER)

BODY COMPOSITION

HOSPITALIZATION AND CHANGES IN BODY COMPOSITION IN A POPULATION-BASED COHORT OF OLDER PERSONS

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Hospitalization-related declines in lean mass may be one pathway through which hospitalization increases disability risk. We conducted a repeated measures analysis using data from six years of the Health, Aging, and Body Composition Study (Health ABC) to examine how 1-year changes in body composition were related to hospitalization in the previous year. Total mass, lean mass, and fat mass were measured annually over 6 exams using DXA. Using GEE models, we compared 1-year changes in body composition for participants with and without a hospitalization in the previous year, controlling for demographic and behavioral characteristics and comorbid conditions. A total of 3366 hospitalizations occurred in 1554 participants between the Year 1 and Year 6 exams. Hospitalization in the previous year was associated with greater declines in total body mass in both men (-0.74kg) and women (-0.81kg), as well as greater loss of fat mass (-0.35kg in men, -0.59kg in women) and lean mass (-0.30kg in men, -0.24kg in women) ($p<.001$ for all comparisons). Associations increased with number of days hospitalized and were largest in men and women hospitalized for eight or more days in the last year. In men, hospital-associated loss of lean mass was confined to participants who lost weight over the entire study period. In women, hospitalization was associated with lean mass loss regardless of total weight change. Results suggest the importance of interventions to maintain lean mass among hospitalized older persons. This research was partially supported by the Intramural Research Program of the NIH, National Institute on Aging.

A COMPARISON OF BIOLOGICAL RISK BY BODY MASS INDEX IN THE UNITED STATES, UNITED KINGDOM, AND TAIWAN

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Weight in various countries has generally been associated with adverse health indicators and outcomes. To examine cross-cultural associations of weight and indicators of risk for certain health conditions, we investigated the link between weight and biological markers of health, often the first sign of deteriorating health in a population, using data from three nationally representative population studies: the United States National Health and Nutrition Examination Survey (2003-2006; N=4400), the English Longitudinal Study of Ageing (2004-2005; N=9139), and the Social Environment and Biomarkers of Aging Study (SEBAS) in Taiwan (2000; N=1023). Indicators of risk were compared across body mass index (BMI, kg/m²) categories (underweight <18.5, normal 18.5-29.9, and obese ≥ 30) for adults age 52 and older. In all countries, obese individuals were at greater risk of having high-risk levels of blood pressure, cholesterol (total, high-density lipoprotein, and low-density lipoprotein), triglycerides, C-reactive protein, and glycated hemoglobin; however, the excess risk linked to obesity was greater in Americans and Britons. Some specific differences among the countries were: very few obese Britons had high-risk levels of fasting glucose and obese Taiwanese had the highest mean blood pressure levels. This study

found cross-country differences in the relationship between BMI and biological risk which may reflect differences in lifestyle and diet.

MEASURING THINNESS IN OLDER PERSONS: ASSOCIATION BETWEEN SIMPLE ANTHROPOMETRIC MEASURES AND MORTALITY

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Context - Low body mass index (BMI) is a general measure of thinness and is widely used as an indicator of undernutrition in older persons although practical and validity problems hamper its use in this age group. Other simple anthropometric measures like low mid-upper arm circumference (MUAC) and calf circumference may better reflect muscle mass and thus stronger associated with mortality. **Objective** - To study dose-response associations of BMI, MUAC, calf, hip and waist circumference with mortality in community dwelling older men and women. **Design** - In 1677 non-institutionalized participants aged ≥ 65 years of the Longitudinal Aging Study Amsterdam anthropometric measurements were performed in 1992-93 and mortality was followed until June 1, 2007 for their vital status. **Results** - Based on visual inspection of dose-response associations, low MUAC was most strongly associated with 15-year mortality in both men and women, even after excluding 3-year mortality and those with a smoking history, obstructive lung disease, or cancer. When categorizing anthropometric measures, low MUAC (<10th percentile versus 40-60th percentile) was clearly associated with mortality in men (hazard ratio (HR) = 2.72 (95% CI, 2.03-3.66)) and somewhat weaker in women (HR=1.60 (95% CI, 1.17-2.21)). Other HR's were: 1.61 (95% CI, 1.19-2.19) (BMI, men); 1.45 (95% CI, 1.03-2.04) (BMI, women); 2.09 (95% CI 1.37-3.18) (calf circumference, men); and 1.38 (95% CI, 0.90-2.11) (calf circumference, women). **Conclusions** - Based on its prediction of mortality and given an easy assessment, low MUAC seems the most appropriate simple anthropometric measure for assessing thinness in older persons.

LOW MID-UPPER ARM CIRCUMFERENCE AND MORTALITY IN OLDER PERSONS: THE INFLUENCE OF FAT AND MUSCLE MASS

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Background - In older persons, low mid-upper arm circumference (MUAC) is associated with 15-y mortality. It is unknown whether this is explained by low muscle or fat mass. **Objective**: To examine whether the association between low MUAC among older persons can be explained by low appendicular muscle mass (aMM), appendicular fat mass (aFM), and/or trunk fat mass (tFM). **Design** - In 475 non-institutionalized participants aged ≥ 65 years of the Longitudinal Aging Study Amsterdam whole body dual-energy x-ray absorptiometry was performed to determine lean and fat mass at several regions. Participants were followed 12 years for their vital status. **Results** - MUAC was, independent of each other and of height, associated with aMM (standardized beta = 0.52 (men), 0.14 (women)), aFM (beta = 0.41 (men), 0.66 (women)), and weaker with tFM (beta = 0.21 (men), 0.20 (women)). Low MUAC (<10th percentile versus 40-60th percentile) was associated with mortality in men (hazard ratio (HR) = 2.92 (95% CI, 1.55-5.49)) and in women (HR = 3.41 (95% CI, 1.56-7.45)). In men, both low aMM (HR=2.37 (95% CI: 1.24-4.55)) and aFM (HR=1.95 (95%

CI, 1.05-3.64)) were independently associated with mortality. No statistically significant association was found for tFM (men and women) and aMM and aLM (women). Only arm FM was statistically significantly associated with mortality in women (HR = 2.67 (95% CI, 1.29-5.52)). **Conclusions** - The association between low MUAC in older persons can largely be explained by both low aMM and low aFM in men and only low arm FM in women.

SESSION 1670 (PAPER)

CARDIOVASCULAR HEALTH

PHYSICAL FUNCTION, METABOLIC HEALTH, AND SUBCLINICAL ATHEROSCLEROSIS IN HEALTHY OLDER ADULTS

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Physical function is a predictor of longevity in ageing, although the mechanisms are poorly understood. We examined the association of physical function with metabolic health and markers of sub-clinical atherosclerosis in a sample of 530 older participants (average age 63yrs) without overt CVD from the Whitehall II cohort. Physical function was assessed from a timed walking test. Electron beam computed tomography and ultrasound was used to assess the presence and extent of coronary artery calcification (CAC) and carotid intima-media thickness (IMT), respectively. Clinically relevant levels of CAC (Agatston score>100) were detected in 24% of the sample. Faster gait speed (top third) was associated with lower risk of CAC (odds ratio=0.54, 95% CI, 0.32 to 0.92) and lower IMT (β =-0.04, 95% CI, -0.01 to -0.07 mm) in comparison with the slowest (bottom third), after adjusting for age, sex, social status and smoking. Faster gait speed was also associated with lower body mass index (β =-0.90, 95% CI, -1.71 to -0.10 kg/m²), C-reactive protein (β = -0.48, 95% CI, -0.93 to -0.03 mg/L), 2 h post load glucose concentration (β = -0.36, 95% CI, -0.72 to 0.00 mmol/L), and higher HDL cholesterol (β = 0.08, 95% CI, 0.00 to 0.17 mmol/L) after adjusting for age and sex. The associations between gait speed and sub-clinical atherosclerosis persisted after adjustment for metabolic risk factors. In summary, physical function, as assessed from a simple timed walk test, is associated with markers of metabolic health and sub-clinical atherosclerosis in healthy older adults.

THE U.S. AND JAPAN: DIFFERENCES IN CARDIOVASCULAR HEALTH BY SEX IN THE 65 AND OLDER POPULATION

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Cardiovascular disease is a leading cause of death in the U.S. with more men affected than women. Cardiovascular disease is not as important as a cause of death in Japan and differences by sex are smaller than in the U.S. While we have comparative information on mortality as a cause of death between the two countries, we know little about how the disease process differs. This study examines sex differences in the 65 and older population in prevalence and incidence of risk factors of cardiovascular disease utilizing data from the Nihon University Japanese Longitudinal Study of Aging (NUJLSOA) (n=6,201) and the U.S. Health and Retirement Study (HRS) (n=22,000). Unlike the U.S., the means between the sexes in Japan are very similar on measures of heart rate (m=70.4, f=72.7), systolic blood pressure (m=155.6, f=155.4), diastolic blood pressure (m=82.4, f=81.5), pulse pressure (m=73.2, f=74.0), and body mass index (BMI) (m=22.4, f=22.4). The percentages of males and females with high-risk systolic blood pressure (m=75%, f=72%) and high-risk diastolic blood pressure (m=25%, f=24%) are also similar in Japan. OLS-Regression showed that, holding age constant, none

of the differences are significant with the exception of pulse (women had 2.23 beats/min ($p<.001$) more than men). T-tests showed a larger difference in the prevalence of stroke ($m=14\%$, $f=10\%$, $p<.001$) and logistic regression showed that women are 37% ($p<.001$) less likely than men to have had a stroke. Aside from stroke, Japan provides an example of similarity in cardiovascular risk and disease not observed in other countries.

RELATIONSHIPS AMONG DIAGNOSED CORONARY HEART DISEASE SELF-REPORTED SLEEP DISTURBANCE AND COGNITIVE IMPAIRMENT

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This study analyzed a pre-existing dataset that contains retrospective self-reported prodromal and acute symptoms of coronary heart disease (CHD) (specifically acute myocardial infarction [MI]) in 1270 postmenopausal women from 15 sites nation-wide. Data were collected via telephone using the McSweeney Acute and Prodromal Myocardial Infarction Symptom Survey. We investigated the estimated prevalence of: 1) sleep disturbance, 2) cognitive impairment (CI), 3) sleep disturbances and CI, and 4) relationships among sleep disturbance, CHD, and CI. The final sample consisted of 42.6% African-American 42.1% Caucasian, 14.6% Hispanic, and 1.6% other. The average age was 66.54 ($+12.09$). Prodromally, 50.6% of this sample reported sleep disturbance and 31.3% reported changes in thinking or remembering (CI). Cross tabulation of sleep disturbance (no, mild, moderate, severe) and change in thinking or remembering (CI) (no, mild, moderate, severe) indicated that 256 (20.15%) women with diagnosed MI reported symptoms of sleep disturbance and CI before their MI. Only 17.2% of this sample reported chest pain as a prodromal symptom. Prodromal reports of sleep disturbance and CI may be related to sleep apnea but because specific questions were not asked pertaining to sleep apnea, we can only surmise what the sleep disturbance response indicates. Further investigation is needed.

ANGIOTENSIN RECEPTOR BLOCKER VERSUS ANGIOTENSIN-CONVERTING ENZYME INHIBITOR USE AND ALL-CAUSE MORTALITY IN HOSPITALIZED ELDERLY HEART FAILURE PATIENTS WITH CHRONIC KIDNEY DISEASE

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Background: Angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) improve outcomes in heart failure (HF) and chronic kidney disease (CKD). However, the comparative value of these drugs in elderly HF patients with CKD is unknown. Methods: Charts of 7009 patients ≥ 65 years discharged alive in 1998-2001 from 106 US hospitals with a primary diagnosis of HF were abstracted. Overall, 4491 (64%) patients had CKD (eGFR < 60 ml/min/1.73m²), of which 2475 (55%) were receiving either ARBs ($n=453$; 18%) or ACEIs ($n=2022$; 82%). Propensity scores for ARB use were used to assemble a cohort of 378 and 1088 patients receiving ARBs and ACEIs, respectively. Subjects were well-balanced on 58 baseline characteristics. Cox-regression models were used to estimate association of ARB use with 4-year all-cause mortality. Results: The mean (\pm SD) age was 79 (± 8) years; 68% were women; 17% were non-whites. Mean eGFR (41 ml/min/1.73m²) and ejection fraction (40%) did not differ between groups. Mortality occurred at a rate of 2500 and 2641 deaths/10,000

person-years of follow-up among matched patients receiving ARBs and ACEIs, respectively (HR when ARB use compared with ACEI use=0.94; 95% CI=0.80-1.10; $P=0.412$). Among 2475 pre-match patients, unadjusted, multivariable-adjusted and propensity-adjusted HRs (95% CIs) for mortality associated with ARB use were 0.85 (0.74-0.97; $P=0.016$), 0.91 (0.80-1.05; $P=0.203$), and 0.93 (0.80-1.07; $P=0.278$), respectively. Conclusion: ACEIs and ARBs had similar effect on 4-year mortality in older adults with HF and CKD. The effect of these agents on renal function, hospitalization and quality of life requires further study.

SESSION 1675 (SYMPOSIUM)

EXPLORING FUNDAMENTALS OF STRENGTH, SPEED AND STAMINA IN THE BALTIMORE LONGITUDINAL STUDY OF AGING

Chair: E. Simonsick, *National Institute on Aging, Baltimore, Maryland*
Discussant: L. Ferrucci, *National Institute on Aging, Baltimore, Maryland*

Strength, speed and stamina define essential components of functional independence and life quality. In this symposium, investigators from the Longitudinal Studies Section of the National Institute on Aging use data from the Baltimore Longitudinal Study of Aging (BLSA), a longitudinal observational study extending over 50 years, to explore various fundamental elements - genetics, personality, biomechanics, homeostatic regulation, body composition and disease pathology - of these key life dimensions. Topics include, an examination of the role of glucose regulation in non-diabetic persons aged 60 years and older in conditioning mobility and endurance; evaluation of the genetic basis for variation in blood iron concentrations, a factor in iron deficiency and diminished exercise tolerance; an investigation of the independent and joint associations of knee osteoarthritis, a disease process, and thigh muscle quality factors with customary and maximum gait speed; an analysis of personality facets and their association with muscle strength decline and how these associations vary across the age-spectrum; and lastly using a state-of-the-art gait laboratory, an assessment of age-related differences in response to different mobility challenges especially changes in speed and joint mechanics. Findings provide further evidence that mobility and its components - strength, speed and stamina - represent complex systems controlled and conditioned by a multitude of fundamental agents.

MOBILITY IMPLICATIONS OF "NOT QUITE NORMAL" GLUCOSE TOLERANCE IN OLDER BLSA PARTICIPANTS

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Although diabetes has been linked to functional limitations, the relationship of glucose tolerance to physical capacity in non-diabetics remains unclear. In 348 BLSA participants aged 60+ years with no contraindication to exertional activity, we compared mobility status of three groups - normal (fasting glucose < 100 mg/dL and 2-hour < 140 mg/dL), impaired (fasting glucose = 100-125mg/dL or 2-hour = 140-199mg/dL) and unaware (fasting glucose < 126 mg/dL and 2-hour ≥ 200 mg/dL) adjusted for age, sex, race, obesity, smoking, and walking behavior. Mobility did not differ between the "normal" and "impaired". However, the "unaware" versus "normal" needed more time to walk 400m (364 v. 281s; $p<.001$), had slower usual (1.01 v. 1.13m/s; $p=.032$) and rapid (1.50 v. 1.70m/s; $p=.011$) gait speed and lower walking ability score (range 0-9; 7.1 v. 8.3 points; $p=.006$). Findings indicate that older seemingly healthy individuals with pathologic 2-hour glucose levels have diminished mobility and suggest that glucose tolerance testing may help identify persons with impending mobility problems.

INDEPENDENT AND JOINT ASSOCIATIONS OF MUSCLE QUALITY, ADIPOSITY AND KNEE OSTEOARTHRITIS ON WALKING SPEED IN THE BLSA

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Osteoarthritis of the knee (KOA) is considered a major cause of mobility limitation; however several predisposing factors for KOA, including excess adiposity and poor thigh muscle quality may contribute to restricted mobility. Data are from 638 BLSA participants (mean age 68, 50% women) classified as KOA present (32%) or absent who underwent knee extensor strength and performance testing and computed tomography of the thigh. Persons with KOA had similar usual ($p=.349$), but slower rapid gait speed than persons without KOA ($p=.005$) (adjusted for age, sex, race and co-morbidities). Thigh muscle density, knee extensor strength and cross-sectional muscle area were positively and fat area negatively associated with usual and rapid gait speed independent of KOA. The relationship between KOA and rapid gait speed was mediated by muscle density and strength. Thus, muscle quality factors that predispose to KOA may impact mobility as much as the presence of KOA.

AGE-RELATED DIFFERENCES IN GAIT PATTERN RESPONSE TO INCREASED SPEED AND FATIGUE - RESULTS FROM THE BLSA

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Age-associated changes in the gait pattern are generally considered compensatory to loss of motor function and physiological reserve. This study investigated the effects of walking under different challenges on speed and muscle force generated during these activities and how this varies with age. We investigated usual, fast and fatigued walking in 152 BLSA participants (72 ± 9 years, 51% women) who could walk unassisted. Walking speed across all tasks decreased with increasing age with fast walking showing an accelerated decline ($p<.001$). Medial-lateral (ML) hip concentric mechanical work expenditure showed accelerating decline with increasing age for fast and fatigued walking compared to usual walking ($p=0.026$ and $p=0.019$, respectively). These findings indicate that older adults experience more pronounced decline in walking speed and ML hip control during challenging tasks. Hence, exercise programs aimed at improving ML hip concentric joint power may improve mobility and prevent mobility loss in older adults.

GENETIC BASIS FOR VARIATION IN PLASMA IRON CONCENTRATION AND ANEMIA-RELATED TRAITS

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Because of the essential role of iron in human physiology and its high toxicity, the absorption and recycling of iron is tightly regulated. To investigate genetic contributors of iron homeostasis in persons not affected by overt genetic disorders of iron metabolism, a genome-wide association (GWA) study was conducted in the InCHIANTI (N=1206) and Baltimore Longitudinal Study of Aging (BLSA, N=722). Top SNPs were examined for replication in the Women's Health and Aging Study (WHAS, N=569). The SNP strongly associated with serum iron concentration was rs4820268 ($p=3.96 \times 10^{-9}$) located on exon 13 of the transmembrane protease serine 6 (TMPRSS6) gene, an enzyme that promotes iron absorption by inhibiting hepcidin transcription. Nonsense mutations in this gene have been previously described in iron-refractory iron deficiency anemia. Our results indicate that common polymorphisms in TMPRSS6 have a more general effect on the regulation of circulating iron concentration in the general population.

CHANGING ROLE OF PERSONALITY ON STRENGTH DECLINE ACROSS THE AGE SPECTRUM: FINDINGS FROM THE BLSA

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How personality impacts muscle strength with aging is unknown. Using the NEO-PI-R, we investigated the association of personality domains and facets and muscle strength decline across the age spectrum ($n=1406$; age-range 20-94 years; average follow-up=6.7 years). We found lower self-discipline ($p=0.007$) associated with accelerated strength decline in old age. Whereas, in early life, high agreeableness (vs. low: $p=0.006$, vs. average: $p=0.042$), particularly the facets of altruism (vs. average: $p=0.039$) and compliance (vs. low: $p=0.027$; vs. average: $p=0.030$) was associated with accelerated decline, lower levels of these facets tended to be associated with strength decline in late life. Thus, the negative effects of low self-discipline and agreeableness on rate of strength decline were more evident in later life while in early life low self-discipline and low agreeableness seemed beneficial. Findings suggest personality factors supportive of strength in early life may place individuals at increased risk of strength decline in late life.

SESSION 1680 (POSTER)

INCONTINENCE

THE PREVALENCE AND BURDEN OF URINARY INCONTINENCE ON THE QUALITY OF LIFE OF THE ELDERLY WITH MEDIGAP INSURANCE

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Research Objectives: To estimate the prevalence and burden of urinary incontinence (UI) on the quality of life (QoL) of Medigap insureds. The findings from this study, the first known to be conducted on a Medigap population, were compared to similar studies conducted on Medicare managed care populations. Methods: Data were obtained from a mail survey known as the Health Update Survey (HUS). The HUS contains several questions on demographics, comorbid conditions, and the Veterans RAND (VR-12), which is a validated 12-item health status survey. The HUS was fielded on a random sample of 15,000 insureds from 10 states in 2008. Respondents were divided into those expected to have UI and others, based on their response to a question about leaking urine during the last six months. Univariate and multivariate models were used to estimate the impact of UI on various QoL measures while controlling for patient demographics and comorbid conditions. Principle Findings: Of the 5,530 survey respondents eligible for the study, 37.5% reported urine leakage. The strongest predictors of UI were female gender, advancing age, and obesity. All the QoL estimates were significantly lower for those with UI ($P<0.0001$). Further, UI had a stronger influence on QoL than did several chronic diseases (diabetes, cancer, and arthritis), particularly with regard to mental health. Conclusions: Consistent with studies on other Medicare populations, UI is common in the elderly and is strongly associated with lower QoL, affecting mental, physical and social dimensions of well-being.

PREVALENCE AND ASSOCIATED FACTORS OF URINARY INCONTINENCE IN LONG-TERM CARE HOSPITALS IN KOREA

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This was the first nation-wide study to explore the prevalence and associated factors of urinary incontinence (UI) among residents in long term care hospitals (LTCHs) in Korea. This study was a descriptive cross-

sectional data analysis of 46,336 residents over 65 years old in 583 LTCHs in July 2008. Data were collected from monthly LTCHs residents' assessment (Patient Assessment Instrument) reports to the Korean Health Insurance Review and Assessment Service, which tracks quality indicators and reimbursement. The residents consisted of 72.7% females, with a mean age of 79.3±7.3 years. The mean length of stay was 0.69±0.87 years. The prevalence of UI at LTCHs in Korea was 68.8%. Odds ratio (CI) were calculated for the associated factors using logistic regression; locomotion dependency 7.06 (6.60-7.55), cognitive impairment 4.90 (4.58-5.24), pressure ulcer 2.54 (2.20-2.93), delirium 2.11 (1.95-2.28), urinary tract infection 2.07 (1.60-2.68), tube feeding 1.97 (1.71-2.27), stroke 1.63 (1.55-1.71), length of stay 1.38 (1.34-1.43), depression 1.35 (1.28-1.41), gender 1.25 (1.20-1.32), and age 1.03 (1.026-1.033). The high prevalence of UI and its associated factors among residents in LTCHs in Korea is similar to nursing homes in the U.S. These findings suggest that UI is a serious issue affecting Korean residents in LTCHs, particularly those who are physically dependent or cognitively impaired. Future study may focus on understanding current approaches to care of UI for this population.

SESSION 1685 (POSTER)

NUTRITION - HS POSTER SESSION

IMPLEMENTING HEALTHIER MENUS IN CARE HOMES FOR OLDER PEOPLE

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The UK Food Standards Agency (FSA) has developed guidelines for healthier menus in care homes. This project examines the feasibility of introducing the guidelines in care homes in the North East of England. The project uses ethnographic methods including observation, interviews and informal conversations with residents, staff and relatives to explore the views of different stakeholders. This presentation will focus on the findings from the first care home, drawing on field notes from observation and 20 interviews conducted prior to the implementation of the guidelines and 22 follow-up interviews conducted either one or five months after implementation. The identification of facilitators and barriers to the implementation of the menus was informed by Normalisation Process Theory. In this presentation, we focus on factors relating to the perceived coherence of the FSA menus, that is, the extent to which the FSA menus made sense to the different stakeholders. The factors that shaped the meaning of the FSA menus in Home 1 can be broadly categorised as relating to: - The 'culture' of Home 1 and the surrounding community - The perceived legitimacy and value of the FSA menus - Perceptions of the role of staff within the home. The findings suggest that for many staff and residents, the FSA menus lacked coherence and often conflicted with their views on what was important for older people living in care homes. Successful implementation will require the development and implementation of strategies to increase the coherence of the FSA guidelines.

FACTORS AFFECTING FRUIT AND VEGETABLE CONSUMPTION: SECONDARY ANALYSIS OF THE 2007 BEHAVIORAL RISK FACTORS SURVEILLANCE SURVEY

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Increased fruit and vegetable consumption has been linked to lower rates of several important diseases; specifically, diabetes, cancer and heart disease. Many of the educational programs from USDA and others have been aimed at encouraging the increase of fruit and vegetable consumption in the population. Although there is considerable evidence that such an increase would indeed benefit many, efforts to this point

have not been as successful as we would like. This research project was designed to examine multiple factors affecting fruit and vegetable consumption; including some that have not been included in many analyses to the point. Secondary analysis of a multi-stage probability survey of the non-institutionalized, civilian population of the United States seemed to present an opportunity to include multiple factors while addressing this issue. The 2007 Behavioral Risk Factors Surveillance Survey was selected both for its recency and for its large sample size. We examined the joint effects of Age, the presence of Diabetes, Region of the Country, Season of the year, Body Mass Index group, Race/Ethnicity, Education Level and Income level. We constructed separate models for Females and Males. The results a significant effect of Age and Presence of Diabetes for both Females and Males. Regionality affected Females more than Males. Seasonality affected both genders as did Body Mass Index. There were only small differences between Race/Ethnic groups. Education and Income levels were more important for Females than for Males. Implications of these findings for future educational campaigns for different age groups. will be discussed.

EFFECTS OF A NURSE-LED NUTRITIONAL PROTOCOL FOR POSTOPERATIVE ELDERLY PATIENTS UNDERGOING GASTROINTESTINAL SURGERY

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The prevalence of malnutrition is high among the elderly who underwent gastrointestinal surgery. The aim of this study was to evaluate the effects of a nutritional protocol on nutritional status of elderly patients underwent an elective gastrointestinal surgery. A pre- and post controlled clinical trial design was employed to enroll subjects aged 65 years and older who scheduled for an elective gastrointestinal surgery at a 2000-bed medical center in Taiwan. Subjects enrolled during 8/07 to 4/08 were served as the controls (n=68) and subjects enrolled since 5/08 to 11/08 served as the experimental group (n=66). For the experimental group, a daily nutritional protocol including oral care, diet education and early mobilization was implemented. Educational pamphlet on overcoming malnutrition was also provided. Subjects in the control group received usual care. Mini-Nutritional Assessment (MNA), body weight, and hand grip strength were measured at three points: before surgery, at discharge and 3 months after surgery. Analyses were performed to examine the group differences using SPSS. Preliminary results shown that, at discharge, patients at experimental group had significant less body weight loss (1.8±2.2 vs. 3.2±3.0 kg, p < 0.05), better MNA scores (21.4±3.0 vs. 13.0±3.3 points, p < 0.05), and less decline in hand grip strength (0.9±3.0 vs. 2.6±3.0 kg, p < 0.05) compared to the controls. The findings support effects of this nurse-led nutritional protocol in preventing malnutrition for the elderly who underwent gastrointestinal surgery.

VITAMIN D DEFICIENCY AND ORAL SUPPLEMENTATION: A PILOT STUDY OF OUTCOMES

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Recent research indicates 25-hydroxyvitamin D (25-OHD) deficiency is prevalent among older adults, especially African Americans (AA). This deficiency has been associated with increased rates of cancer, hypertension, and infection. However, the current healthcare system lacks guidelines for routine screening of 25-OHD deficiency, and the recommended dosage of 200-400 IU may be inadequate. This pilot study, a retrospective chart review, was conducted on community-dwelling veterans age 65 and older who were cared for in VA geriatric primary care clinics and had one or more recorded 25-OHD levels. A total of 234 charts were reviewed (124 Caucasian, 78 AA, 32 other/unknown race). At baseline, 206 (88.0%) patients had a serum

level below normal (32 ng/mL). An independent samples t-test revealed AA patients had a significantly lower mean level ($M=15.38$ ng/mL, $SD=8.743$) compared to Caucasians ($M=19.85$ ng/mL, $SD=19.85$) [$t=3.272$, $df=184.667$, $p=.001$]. Despite supplementation efforts, few patients overall increased to normal serum levels ($N=16$ of 202, 7.9%), and fewer AA veterans were as likely as Caucasians to increase their serum levels to normal (AA: $N=4$ of 78, 5.1%; Caucasian: $N=12$ of 124, 9.7%). From baseline to Time 3, differences remained in mean vitamin D levels between Caucasians ($M=24.0$ ng/mL) and AAs (16.5 ng/mL) [ANOVA $p=.02$]. In addition, low vitamin D levels were associated with clinical morbidities, such as falls ($N=139$, 59.7%) and hypertension ($N=203$, 87.1%). Future research is needed to explore vitamin D deficiency, the low response rate to supplementation, and associations with parathyroid levels, medications, and other health complications.

SESSION 1690 (POSTER)

PRESSURE ULCERS

ASSOCIATION BETWEEN SUPPORT SURFACE USE & PRESSURE ULCER INCIDENCE IN ELDERLY HIP FRACTURE PATIENTS

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National clinical practice guidelines recommend that patients at risk of pressure ulcers use pressure-redistributing support surfaces (PRSS), i.e., mattresses and overlays intended to prevent pressure ulcers, but it is not known whether types of PRSS vary in effectiveness. To evaluate the association between use of PRSS and pressure ulcer incidence, we performed a study of 648 patients age ≥ 65 years who underwent surgery for hip fracture. Full-body skin examinations were performed at baseline and every two days for 21 days; type of support surface (standard, static air, gel filled, alternating pressure, or low air loss mattresses; foam, static air, or alternating pressure overlays; or other PRSS) was recorded at each study visit. A new stage II-IV pressure ulcer was observed at 4.0% (89/2,213) of visits following use of PRSS, and 4.2% (193/4,627) of visits following no use of PRSS. The rate of incident stage II-IV pressure ulcers per person-day of follow-up was marginally lower for those with pressure-redistributing overlays in use, compared to those with no PRSS (relative rate 0.7, 95% CI 0.5-1.0); the pressure ulcer rate for patients with pressure-redistributing mattresses did not differ significantly from that of patients with no PRSS (relative rate 0.9, 95% CI 0.6-1.3). There was no significant association between pressure ulcer incidence rate and use of any of the eight types of PRSS, compared to standard mattress. Additional study is needed to determine if there is a difference in effectiveness between types of PRSS in preventing pressure ulcers, as this study provided no such indication.

TURNING AND DOCUMENTATION FIDELITY IN A RANDOMIZED CONTROLLED TRIAL FOR PRESSURE ULCER PREVENTION

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Background: Research on pressure ulcer prevention focuses on the reduction of prevalence and/or incidence of pressure ulcers as a result of one or more interventions. In one observational study of repositioning frequencies for pressure ulcer prevention in nursing facilities, written documentation of adherence to repositioning greatly exceeded actual practice. Purpose: To test the percent agreement between the Certified Nursing Assistant [CNA] Shift Documentation tool for repositioning and independent observations of position documented by nurses on a

Supervisor Repositioning Checklist tool. Methods: The TURN [Turning for Ulcer Reduction] Study is a randomized controlled trial comparing every 2 hour in-bed repositioning with 3 or 4 hour in-bed repositioning on pressure ulcer development. Participant repositioning is performed by CNAs who document the time and repositioning at the point of care. Nursing supervisors make independent observations of the participant's position approximately every hour. Percent agreement was based on the CNAs documentation and the nurses observation of the participant's position, either right, back, left, or chair. Acceptable percent agreement was set at 80% or higher. Results: For 94 nursing facility residents and 16,552 repositions documented by CNAs, the percent agreement between CNA documentation and nurse observation was 83.79%. Percent agreement for 2, 3, and 4 hour repositioning was 84.42%, 83.5%, and 82.49%, respectively. Discussion: Testing percent agreement between CNA documentation of the TURN Study intervention and independent nurse observation suggests accurate turning documentation by CNAs.

MULTI-FACETED INTERVENTION TO PREVENT SKIN TEARS IN A MAJOR LONG-TERM CARE FACILITY

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Skin tears in the elderly are a major challenge for nursing homes. These traumatic wounds can be associated with pain and potentially infection. Their occurrence in the elderly reflects underlying physiologic skin changes, with significant comorbidities and nutritional decline. Despite the difficulty of prevention, skin tears are erroneously considered a determinate of poor care or abuse by NH staff. The MJHH is a 492-bed teaching nursing home tasked with the care of very frail, old, and chronically ill elderly. **METHODS:** In 2007 a QI program was initiated to reduce the number of skin tears in residents. Major intervention components included bathing with moisturizing soaps; daily AM and PM moisturizing lotion; special peri-care cleansers after incontinent episodes; application of protective creams; application of skin sleeves for high-risk patients; intensive staff training for patient transfers; removal of wheelchair foot-rests before transferring; and high-protein nutritional supplements. Data were collected for a 9-month period before the program and prospectively collected for a 9-month period after the intervention. The average daily census for the 18-month period was 440. **RESULTS:** Before the multi-faceted intervention 300 skin tears were documented; after implementation, 166 skin tears were recorded, for a 35% decline ($p < .001$). **CONCLUSION:** Significant reduction in skin tears was accomplished through an intense, multi-faceted intervention, which can serve as a blueprint for similar institutions. Despite the success of the QI program, skin tears continue as a care challenge, indicating that newer technology must be sought in order to overcome the floor effect.

SESSION 1695 (SYMPOSIUM)

PREVENTION IN RELATION TO AGING

Chair: K. Avlund, University of Copenhagen, Copenhagen K, Denmark
Discussant: A.E. Stuck, Department of Geriatrics, University of Bern, Bern, Switzerland

There is increasing evidence of beneficial effects of prevention of functional decline in old age. This symposium will bring together research on preventive efforts towards older people. Hendriksen will describe the possibilities for integrated health care in relation to preventive efforts among old people with special focus on tools for coordination, integration and decisions in daily practice. Some of the studies will describe results from the Danish Intervention Study on Preventive Home visits in 34 Danish municipalities. This study showed that edu-

cation of preventive home visitors and general practitioners postponed functional decline in the older people living in the municipalities. Based on data from this project Ekman will delineate how different invitational procedures influence whether older people accept the preventive home visits and Yamada will outline whether continuity in the preventive home visits is related to beneficial outcomes in the older adults. Lastly Sahlen will introduce results from a qualitative study in Sweden on how older adults cope with their everyday life after the preventive home visits and how home visitors can affect the health of older adults. Together these presentations address some of the complex patterns involved in prevention in older adults.

PREVENTION AND HEALTHY AGEING

C. Hendriksen, *Institute of Public Health, University of Copenhagen, Copenhagen, Denmark*

Carsten Hendriksen, Associate Professor, Institute of Public Health, University of Copenhagen Plenty of evidence exists concerning effective prevention and healthy ageing. New technology, preventive medication, physical activities and integrated health care are good examples in a preventive perspective. Because of this older people have the chance of living longer without onset of disability. By law, preventive home visits must be offered to people aged 75 years or over in Denmark. Together with proactive efforts in General Practice, cross-sectional collaboration in relation to rehabilitation, comprehensive geriatric assessment and management, the preventive possibilities are at hand. But do older people have access to these possibilities to day?. How to translate evidence into practice? With focus on preventive medication the presentation describes the possibilities in integrated health care in relation to decision making, the influence of social and ethnic factors, alternatives to medication and tools for coordination, integration and decision in daily practice.

CONTINUITY IN PREVENTIVE HOME VISITS

Y. Yamada, M. Vass, K. Avlund, *University of Copenhagen, Copenhagen, Denmark*

Continuity is a key for developing trustful relationship between client and clinician, and may be related to better client outcomes. This study aims to examine whether continuity in a preventive home visits has any association with preventive benefits among older people. The study population included 947 nondisabled 75- and 80-year old persons who had had yearly preventive home visits for 3 years. Continuity of preventive home visits was defined as having the same visitor for all visits. Benefits of preventive home visits were measured by questionnaire to the old persons on, e.g. whether or not the visits had made their daily life easier to manage, whether or not they had important information from the visits. In total, 57% of the participants had continuity. These persons were more satisfied with and had more benefits from the visits than those without continuity. The result suggests importance of continuity in preventive home visits.

PREVENTIVE HOME VISITS – ARE INVITATIONAL PROCEDURES OF IMPORTANCE?

A. Ekman, K. Avlund, M. Vass, *University of Copenhagen, Copenhagen, Denmark*

In Denmark the preventive home visits is an elective offer to all citizens aged 75 or older. The aim of the study was to describe how different invitational procedures were associated with first preventive home visit acceptance rates. The study was designed as secondary analyses on data from the Danish Intervention Study on Preventive Home Visit in 34 municipalities. Three invitational procedures were identified through inspection of invitational letters and interview with leaders and home visitors in the municipalities. In both sexes the highest acceptance rate were associated with an invitational letter proposing date and time for the visit, less visits were accepted when offered by telephone, and fewest visits were accepted when the visit was offered with an invi-

tational letter without proposed date and time. It was concluded that invitational procedures were associated with first preventive home visit acceptance rates among citizens aged 75 or more.

PREVENTIVE HOME VISITS IMPROVE SWEDISH SENIORS COPING STRATEGIES AND HEALTH

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Preventive home visits (PHVs) promote health in old age. Research indicates that PHVs have a positive health effect on mortality, admissions to institutions, and falls. To understand how seniors perceive PHVs and how they cope with everyday life when PHVs have ended, five individual research interviews were conducted with seniors aged 79 – 88 years. When seniors had a low degree of control over their daily life they appeared to gain more from PHVs than other seniors. To help seniors to increase control seems essential if they are to lead an independent and healthy life. PHVs can contribute to positive health development by improving seniors' sense of control and processing the used coping strategies. It is important that home visitors understand how the different coping strategies used by seniors affect health. After attending this activity participants will understand why home visitors must promote seniors control in order to affect health.

SESSION 1700 (PAPER)

TECHNOLOGY

A TECHNOLOGY-BASED SELF-MANAGEMENT PROGRAM FOR OLDER ADULTS WITH CHRONIC DISEASE

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Objectives: The aim of this feasibility study was to observe self-care management responses of chronically ill older adults to a technology-based in home support group intervention program. The objectives included; a) helping chronically ill older adults to manage prescribed rehabilitation regimes more effectively, achieve improved health outcomes, and maintain a satisfactory quality of life. Methods: Eighteen older adults with chronic disease (diabetes, congestive heart failure, chronic obstructive pulmonary disease) (six per disease group) who had difficulty maintaining medically recommended rehabilitation regimes participated in an Internet-based video conferencing intervention program. The program consisted of ten weekly online sessions facilitated by a healthcare professional and was supported by a password protected web site [CFM©] with web pages, video-audio interactivity, and information access designed according to usability criteria sensitive to the physical and attention limitations of older adults. The intervention program addressed the health care needs of chronically older adults by delivering to their homes, via the Internet, disease-specific information with regard to disease diagnosis, course of illness and self-care strategies. In addition the aim of the intervention was to provide psychosocial support in a group, mutual help format. All participants were interviewed at the end of the intervention program; interviews were transcribed and analyzed using open coding methods. Results: The participants were positive about using technology to access health services, found the support group format helpful in terms of addressing the barriers to maintaining recommended rehabilitation behaviors, and were consistent in using the web site tools to monitor self-care management behaviors.

IMPROVING CHRONIC CARE MANAGEMENT: AN IPHONE APPLICATION FOR POST-STROKE RECOVERY

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A feasibility study investigates use of an iPhone-based medication data gathering and reporting system for individuals in post stroke recovery. Research program goals include: improved health through better patient education, improved medication adherence, timely monitoring and reporting of patient behaviors, cognition, and attitudes, and automated sharing of information with primary care providers (PCPs). Previous research has demonstrated success training older adults in using similar systems, a PDA-based medication reminding system designed for older adults (Sterns, 2005). The current study focuses on three significant elements of a care management model first proposed by Wagner, then operationalized and tested by Allen et al. (2002, 2004): First, improving medication appropriateness and adherence to both medications and rehabilitation programming; Second, improvement in communication with the PCP and specialists involved in care of the patient; Third, improving education of patients and caregivers. The authors utilize a previously tested education and data collection booklet as a control treatment and the proposed iPhone-based system as the experimental treatment. Forty eligible patients undergoing acute treatment at a local hospital are randomized into either group. The authors will present results and next steps, and discuss larger implications for chronic care management. After attending this activity, participants will be able to discuss potential applications of such technology for better involving patients in their own care and improving the quality of information available to PCPs to support better patient care.

IMPLEMENTATION OF A MEDICAL MODULE IN A LONG TERM CARE ELECTRONIC MEDICAL RECORD (EMR)

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Background: Most electronic health records designed for use in a nursing home lack a physician component. Methods: After reviewing 24 EMR software products, Gurwin selected Optimus EMR, Inc., a long term care, web-based product. The vendor agreed to develop a "medical module" dedicated to physician documentation. Over a three year period, Gurwin implemented EMR and CPOE on all nursing units. The medical director, in conjunction with medical staff, created the contents for templated notes, including admission, discharge/transfer, required federal interim, and progress notes. The templated notes incorporated reminders for both ACOVE and PQRI measures. Optimus transformed these notes into an electronic format, which the medical staff beta-tested. Results: Although certain workflow processes were streamlined, time savings were not achieved across the board. Average physician time to write initial and interim notes and admission orders increased significantly, whereas, time for 28 day reorders decreased. Nursing time to pick up 28 day orders on 20 residents decreased dramatically from a mean of 9.6 hours to 16.9 minutes. An interface with the laboratory vendor allowed for real time, electronic results reporting of laboratory data directly in patients' records. As a result of the medical EMR, Gurwin is now a partner in the Suffolk County RHIO and a participant in multi-center grants evaluating use of electronically generated data to improve patient outcomes. Conclusions: Implementation of a medical module in a long term care EMR enabled generation of legible, comprehensive electronic medical notes. Future studies will examine the impact of the medical module on quality indicators.

ROLE OF ELECTRONIC INFORMATION SYSTEMS (EIS) IN PAIN MANAGEMENT IN U.S. NURSING HOMES: 2004 NNHS

A. Bercovitz, P. Jamison, M. Sengupta, J.E. Watts IV, National Center for Health Statistics, Hyattsville, Maryland

Electronic information systems (EISs) have been promoted as tools to improve the efficiency and quality of health care. However, there are few empirical, nationally representative studies of the association between EISs and quality of care. The purpose of this analysis is to assess the association between EISs for medication orders, medication administration, or resident medical records and two quality measures - reported pain and pain management. Analyses are based on linked facility and resident components of the 2004 National Nursing Home Survey, a nationally representative sample survey. Logistic regression was used to assess independent contributions of facility and resident characteristics. The two measures of pain management, standing and "as needed" orders, were each dichotomized to no order versus order alone or with other approaches. Preliminary analyses suggest that having an EIS for resident records was associated with reported pain. Also, residents of private non-profits, smaller facilities, women, and residents with diagnoses of some chronic conditions were more likely to have reported pain, while residents in facilities that were in metropolitan areas and had a lower proportion of residents on Medicare were less likely to have reported pain. Analyses of types of pain management orders found no association with the use of any of the three EISs. Residents of smaller facilities were more likely to have an "as needed" order either alone or in combination with other methods, and less likely to have a standing order alone or in combination. Analyses are planned on the association of EISs and medications.

SESSION 1705 (SYMPOSIUM)

VITAMIN D'S ROLE IN THE DISABILITY PATHWAY AMONG DIVERSE POPULATIONS OF OLDER ADULTS

Chair: D.K. Houston, Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina

Discussant: S. Kritchevsky, Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina

Increasing knowledge of the physiologic effects of vitamin D suggest that 25-hydroxyvitamin D (25(OH)D) insufficiency accelerates the disablement process through a wide range of chronic conditions that are directly related to the development of limitations in physical function, including knee and hip osteoarthritis, diabetes, hypertension, and cardiovascular disease, as well as through direct effects on muscular function. Vitamin D metabolites affect muscle metabolism through both genomic and non-genomic pathways and play an important role in the regulation of calcium transport and protein synthesis. National data indicate that approximately one-third of U.S. adults aged 70 years and older have insufficient 25(OH)D levels (serum 25(OH)D <50 nmol/L [<20 ng/mL]). Each paper in this symposium examines the role of serum 25(OH)D on aspects of physical function across the older age range (InCHIANTI, aged 65+; Health ABC, aged 70-79; CHS All Stars, aged 77-100; the Georgia Centenarian Study, aged 80-89 and 98+), as well as in men (MrOS, aged 65+), an understudied group. Physical function was measured by objective measures of performance and muscle strength as well as self-reported measures of disability. This symposium will address the consistency of the association between 25(OH)D and physical function in initially well-functioning older persons, persons of advanced old age, as well as in blacks and whites, men and women. Both cross-sectional and longitudinal associations will be discussed.

25-HYDROXYVITAMIN D AND PHYSICAL FUNCTION IN ADULTS OF ADVANCED AGE: THE CHS ALL STARS

D.K. Houston¹, K. Shea¹, J.A. Toozé¹, P.H. Chaves², J. Robbins³, A.B. Newman⁴, S. Kritchevsky¹, 1. *Sticht Center on Aging, Wake Forest University School of Medicine, Winston Salem, North Carolina*, 2. *Johns Hopkins University, Baltimore, Maryland*, 3. *University of California at Davis, Sacramento, California*, 4. *University of Pittsburgh, Pittsburgh, Pennsylvania*

We examined the association between 25-hydroxyvitamin D (25[OH]D) and physical function in the CHS All Stars cohort (n=988). Physical performance was assessed using the short physical performance battery (SPPB) and self-reported function using activities of daily living (ADLs). The mean age of the participants was 85.2 yrs; 64% were women, and 83% were white. The mean 25(OH)D level was 64.4 ± 25.2 nmol/L. Participants in the lowest quartile of 25(OH)D (<45 nmol/L) had significantly lower SPPB scores (5.34 ± 0.21 vs. 5.92 ± 0.23, p=0.008) compared to participants in the upper quartile (≥80 nmol/L) after adjusting for demographics, behavioral characteristics, BMI, and season. Participants in the lowest quartile of 25(OH)D were also more likely to report ADL disability compared to participants in the upper quartile (26.3% vs. 18.1%, p=0.05). In summary, low 25(OH)D levels were associated with worse physical performance and impaired ADLs among adults of advanced age.

SERUM 25-HYDROXYVITAMIN D LEVELS PREDICT WALKING SPEED IN OLDER COMMUNITY-DWELLING ADULTS

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Background: Vitamin D may play a role in musculoskeletal function, but the relationship between vitamin D and walking speed has not been well characterized. Objective: To examine the relationship between serum 25-hydroxyvitamin D (25[OH]D) at baseline and walking speed at baseline, 3- and 6-year follow-up. Methods: Walking speed over a 4 m course was assessed in 1,006 adults, aged ≥65 years, in the InCHI-ANTI study, a population-based study of aging and mobility disability in Tuscany, Italy. Results: Median (25th, 75th percentile) serum 25(OH)D concentrations were 39.9 (26.2, 63.9) nmol/L. Participants in the highest versus lowest quartile of serum 25(OH)D at baseline had higher walking speed at baseline, 3-, and 6-year follow-up, respectively (all P < 0.001) in a multivariate mixed effects regression model adjusting for age, sex, season, cognitive function, smoking, and chronic diseases. Conclusion: In older community-dwelling adults, serum 25(OH)D is an independent predictor of walking speed.

25-HYDROXYVITAMIN D AND LOWER EXTREMITY FUNCTION: THE HEALTH ABC STUDY

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We examined the association between serum 25-hydroxyvitamin D (25[OH]D) and lower extremity function in well-functioning older adults in the Health ABC Study (n=2,704). Lower extremity function was assessed using the expanded short physical performance battery (HABC-SPPB), 400-m walk test, and isokinetic knee strength. Participant mean age was 74.7 years; 51% were women, 39% were black, and 33% had

insufficient 25(OH)D levels (<50 nmol/L). We determined a 25(OH)D threshold above which no further improvement in lower extremity function was observed of approximately 75 nmol/L using a nonparametric loess model. After adjusting for demographics, behavioral characteristics, BMI, and season, participants with 25(OH)D <50 nmol/L had significantly lower HABC SPPB scores and slower 400-m walk speeds than those with 25(OH)D ≥50 nmol/L (p for trend, <0.0001). There was no association between 25(OH)D and isokinetic knee strength. In summary, lower 25(OH)D levels were associated with poorer physical performance but not strength in older adults.

25-HYDROXYVITAMIN D AND HANDGRIP STRENGTH: THE GEORGIA CENTENARIAN STUDY

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We examined the association of serum 25-hydroxyvitamin D (25[OH]D) and handgrip strength in participants of the Georgia Centenarian Study aged 80-89 (n = 80, 66% female, 18% black) and 98+ years (n = 236, 84% female, 20% black). The prevalence of vitamin D insufficiency (25(OH)D < 50 nmol/L) was 22.5% in the 80s and 36.4% in the 98+. Handgrip strength was significantly lower in vitamin D insufficient vs. sufficient individuals (11.4 vs. 14.8 kg, P < 0.01) when controlled for age, gender, race, nursing home residence (vs. community), season, and other potential confounders (serum albumin, hemoglobin, BMI, and MMSE). Similarly, vitamin D insufficiency was significantly associated with lower handgrip strength in subgroup analyses of 80s only, 98+ only, and women only, when adjusted for potential confounders. In summary, poor vitamin D status may be a modifiable risk factor for loss of strength into very late life.

VITAMIN D LEVELS AND PHYSICAL PERFORMANCE IN OLDER MEN: MROS STUDY

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Vitamin D supplementation may reduce falls by preserving musculoskeletal function. Studies in women found that lower 25-hydroxyvitamin D (25-OHD) levels were associated with lower physical performance. Data in men are lacking. We examined the association between baseline 25-OHD levels in 1606 community dwelling men aged >65 with repeated measures of grip strength, leg power, gait speed and chair stands 4.6 years apart. Three quarters of the men were vitamin D deficient/insufficient (25% with 25-OHD <20 ng/ml and 50% with 25-OHD=20-29 ng/ml). Vitamin D deficient men had 2kg weaker grip strength and 0.05 m/s slower walking speed than vitamin D sufficient men after adjusting for age, site, race, season, physical activity and skeletal muscle mass. Baseline vitamin D levels were not associated with baseline leg power or chair stands, or with change in physical performance.

WOMEN'S HEALTH - HS PAPER SESSION

SERUM ESTROGEN METABOLITES AND SYSTOLIC BLOOD PRESSURE IN A POPULATION-BASED SAMPLE OF POSTMENOPAUSAL WOMEN

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Hypertension is more prevalent among men at younger ages and among women after age 60. This pattern is consistent with age- and sex-related differences in serum estrogen concentrations. The purpose of this study was to examine the relationship between serum estrogens and systolic blood pressure (SBP) in a population-based sample (N = 47) of postmenopausal women living in Cook County, Illinois. Seated systolic and diastolic arterial blood pressure readings were obtained from the nondominant arm, which was supported at the heart level by a cushion. Demographic and health history information was obtained via questionnaires. Serum was analyzed for 17beta-estradiol and 14 estrogen metabolites using mass spectrometry. Of the 37 women for whom all data were available, mean age was 57 years (SD = 4 years) and mean SBP was 129 mm Hg (SD = 11.9 mm). Univariate analysis revealed an inverse relationship between SBP and both natural log (ln) 16alpha-hydroxyestrone (r = -0.360, p < 0.05) and ln 16-ketoestradiol (r = -0.360, p < 0.05). In multivariate analysis which adjusted for age, race, ethnicity, body mass index, and use of cardiovascular medications, ln 16alpha-hydroxyestrone (B = -5.3, SE = 2.1, p < 0.05) and ln 16-ketoestradiol (B = -4.7, SE = 1.9, p < 0.05) were both significant predictors of SBP. Ancillary analysis revealed that 16-ketoestradiol likely served as a marker for 16alpha-hydroxyestrone. 16alpha-hydroxyestrone-induced endothelial prostacyclin production may explain this metabolite's association with lower SBP. These results may have important implications for the screening and treatment of hypertension, especially among postmenopausal women.

VAGINAL ATROPHY SYMPTOMS: NATURAL HISTORY AND PREDICTORS IN OLDER WOMEN

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Background: Vaginal atrophy is a widely recognized consequence of menopause and aging, but little is known about the natural history and determinants of vaginal atrophy symptoms in older women. Methods: Prospective, 2-year, population-based cohort of 1,017 postmenopausal women aged 55 to 75 years. Vaginal dryness, itching, and painful sexual intercourse were assessed by questionnaire, and vaginal microbial swabs were performed at baseline, 1 year, and 2 years. Generalized estimating equations were used to identify factors associated with symptoms. Results: Half of women (N=471) reported problematic vaginal dryness, a third (N=316) reported itching, and 40% of sexually active women (N=166) reported painful intercourse at baseline. Of women not taking estrogen, half of those reporting symptoms at baseline were symptomatic after 24 months. Vaginal dryness was associated with younger age (OR=0.81, 95%CI=0.69-0.94 per 5 years), non-white race (OR=1.53, 95%CI=1.04-2.27), diabetes (OR=1.51, 95%CI=1.07-2.12), lower SF-36 physical functioning scores (OR=0.90, 95%CI=0.85-0.97 per 10-points), lower body mass index (OR=0.81, 95%CI=0.71-0.93, per 5 kg/m²), recent sexual activity (OR=1.14, 95%CI=1.08-1.21), and vaginal colonization with enterococci (OR=1.25, 95%CI=1.04-1.51). Vaginal itching was also associated with lower physical func-

tioning scores (OR=0.86, 95%CI=0.80-0.92 per 10 points). Risk factors for painful intercourse included younger age (OR=0.72, 95%CI=0.56-0.93 per 5 years), diabetes (OR=3.48, 95%CI=1.93-6.27), lower body mass index (OR=0.76, 95%CI=0.61-0.95 per 5 kg/m²), and higher vaginal pH (OR=1.10, 95%CI=1.00-1.21 per 0.5 units). Conclusions: Vaginal symptoms affect a large proportion of women after menopause, particularly diabetics and those with lower body mass index, but resolve for up to half without estrogen therapy.

HORMONE THERAPY AND CHANGE IN FUNCTION IN THE WOMEN'S HEALTH INITIATIVE

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Background: Although estrogen therapy may be linked to biologic pathways that maintain higher physical function, the evidence is mostly derived from observational epidemiology and therefore suffers from numerous limitations and confounders. Data from the Women's Health Initiative (WHI) clinical trial were analyzed to clarify the role of hormones in changes in physical function in post-menopausal women. Methods: Detailed assessments of physical function were conducted in a sample of women aged 65 to 79 at time of enrollment at 40 clinical centers beginning in 1993. A total of 922 non-disabled women with previous hysterectomies were randomized to receive estrogen-only or placebo; 1458 non-disabled women with intact uteri were randomized to receive estrogen plus progestin or placebo. All women completed three performance-based measures of physical function at baseline. These measures were repeated after 1, 3, and 6 years. Changes in physical function were analyzed for treatment effect, and sub-group differences were evaluated. Results: Among all women in the trial, participants' grip strength declined by 12.0%, chair stands declined by 3.5%, and walk-pace slowed by 11.4% over six-years of follow-up (all p-values < 0.0001). Hormone therapy, as compared to a placebo, was not associated with an increased or decreased risk of decline in physical function in either the intention-to-treat analyses or in analyses restricted to participants who self-reported compliance in taking study pills. Conclusions: Hormone treatment provided no overall protection against functional decline in non-disabled postmenopausal women aged 65 years or older over 6 years of follow-up.

MENOPAUSE ACCELERATES IMMUNE SENESCENCE AND DIMINISHES IMMUNE RESPONSE TO VACCINATION

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Menopause and the associated loss of estrogen and progesterone represent a dramatic physiological change. Although, several studies strongly suggest that female sex hormones influence the immune system, the impact of menopause on immune function remains poorly understood. To address this question, menopause was induced surgically in adult and aged female rhesus macaques by bilateral oophorectomy. Our studies show that ovariectomized adult female rhesus macaques have increased frequency of CD8CD28- T cells, a hallmark of T cell senescence. More importantly, ovariectomized female rhesus macaques generate a lower antibody and T cell responses following vaccination than age-matched cycling females. Estrogen replacement therapy (ERT) improved both T and B cell responses to vaccination in elderly oophorectomized female rhesus macaques. These data suggest that loss of estrogen that accompanies menopause exacerbates immune senescence and

that ERT should be considered as a strategy to improve immune response to vaccination in aged postmenopausal women.

SESSION 1715 (SYMPOSIUM)

BUILDING THE EVIDENCE BASE OF EXPERIENCE CORPS®

Chair: *N. Morrow-Howell, Washington University, St. Louis, Missouri*

Discussant: *L. Strong, Experience Corps National, Washington DC, District of Columbia*

Experience Corps® (EC) is a program that brings older adults into public elementary schools to improve academic achievement of students, through tutoring, small group academic help and assisting teachers. It has been in existence for over 13 years and currently operates in 23 cities, where a total of 2,000 adults over the age of 55 serve 20,000 elementary school students. Given early evidence of the positive impact of the program on both students and older volunteers, its national scope, and replicability potential, this program is being studied by various researchers, using a range of designs and analyses. Based on Fried's social model of health promotion, the effects of high-commitment volunteering and factors associated with these effects are being assessed using experimental and quasi-experimental designs. In addition to effects on older volunteers, effects on students and teachers and well as aspects of program design are being considered. In this session, researchers will overview two large research projects that focus on the Experience Corps program and update the audience on the current status of the evidence base. The session will begin with a paper that reviews the two research projects, highlighting designs, variables and study topics; and the samples of participating EC volunteers will be compared. Next, four different papers will be presented which represent the range of topics under investigation: the social marketing of the program, costs of operating the program, the effects of stipends, and health benefits of participation on the EC volunteers. The Chief Operating Officer of Experience Corps will discuss application of these findings.

OVERVIEW OF THE COMPLEMENTARITY OF THE BALTIMORE EXPERIENCE CORPS TRIAL AND THE NATIONAL SURVEY

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We capitalize on different study designs in the Baltimore Experience Corps Trial (BECT) and a national survey of the program in 18 cities across the U.S. to examine sociodemographic and motivational diversity which may increase generalizability of program findings and potential for dissemination. In the BECT, 534 adults aged 60-89 years were randomized, with 86% female, 89% African-American, 45% with \leq high school education, and 42% reporting health as very good to excellent. In the national survey, 730 volunteers aged 50-84 included 86% females, 53% African-American, 30% with \leq high school education, and 85% reporting health as very good to excellent. For both studies, "word of mouth" recruitment was most successful. Primary motives for participation in both studies included a desire to help children (31%) with other motives varying substantially across studies and in ways that will inform understanding of program retention and effectiveness, particularly among at-risk segments of the population.

A SOCIAL MARKETING CONCEPTUAL FRAMEWORK FOR CIVIC ENGAGEMENT BASED PUBLIC HEALTH INTERVENTIONS

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We present a social marketing conceptual framework for the Experience Corps (EC) program in Baltimore. In social marketing, the core product represents the desired benefit; the actual product represents the desired behavior. Increased physical activity is a core product in EC, while the actual product is a volunteer opportunity in public schools. We describe EC using the four P's of product, place, price and promotion and describe the 1st year of recruitment for the Baltimore Experience Corps Trial. One hundred fifty-five older adults were randomized. The average age was 69; 84% were women, and 86% were African American. Word of mouth was the most successful recruitment strategy while gospel radio was the second most successful. "The four P's" can be used to develop future community-service based public health that "market" generative opportunities. Interventions modeled after EC have the potential to promote physical activity through both mass media and grassroots organizing.

THE COST OF IMPLEMENTING EXPERIENCE CORPS WITH STIPENDS IN PUBLIC ELEMENTARY SCHOOLS

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The Baltimore Experience Corps has been implemented in public elementary schools with monthly participant stipends. The Greater Homewood Community Corporation (the community partner that manages the volunteer program along with Johns Hopkins University for Baltimore City Public Schools) provided expenditure reports for fiscal year 2008 (7/1/07-6/30/2008). Annual expenditures totaled \$1.55 million. Combined Expenditures for participant stipends and related payroll taxes accounted for 56.1% of the total. VISTA program participants at the schools received 2.4% of expenditures, and salaries, payroll taxes, and fringe benefits for program staff accounted for 21.9% of expenditures. Training accounted for 2.0% of expenditures and outreach accounted for 1.4%. Thus, calculated non-stipend related costs of program operation are a greater percentage of total costs than what was previously projected (30%). Although costs that must be offset to achieve a positive net benefit are likely to increase proportionately, the program had sufficient benefits to continue to be cost-effective.

THE EFFECTS OF STIPENDS ON THE EXPERIENCE CORPS PROGRAM

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AIM: About half of Experience Corps (EC) participants across the country are provided stipends in exchange for higher levels of commitment, and there are no income requirements. We examine the effect of stipends on who serves, for how long, and with what benefits. METHOD: Data derive from phone surveys with 263 members who joined the program in the 2006-2007 academic year and participated in a follow-up survey at the end of the year (56% were stipended). Bivariate and multivariate analyses correcting for clustering were performed. FINDINGS: Stipended participants were more likely to be non-Caucasian and had less household income. Stipended members served for more hours and were more likely to complete the program, as would be

expected; but they also reported more benefits from participating, even after controlling for higher levels of involvement. IMPLICATIONS: These results suggest that stipends may promote program inclusion, efficiency, and effectiveness.

HEALTH-RELATED BENEFITS FROM HIGH-COMMITMENT VOLUNTEERING

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Aim. We evaluated the effects of Experience Corps (EC) on volunteers' health. **Methods.** EC participants consisted of new volunteers to the program from 14 cities. They were pretested before beginning their volunteer work and posttested after two years of service. We compared changes over time between EC participants ($n=167$) and matched observations from the Health and Retirement Study. We used Mahalanobis matching combined with the boosted propensity scores to develop the comparison group. We corrected for clustering effects and calculated adjusted post-test means of health outcomes, controlling for all covariates and the propensity score. **Findings.** Compared to matched controls, the EC group showed lower depression and functional limitation, and effects were large. Both groups showed a decline in self-rated health, but EC group registered less decline. **Implication:** This study offers a stringent analytic approach to increase confidence in the growing evidence that supports the social model of health promotion.

SESSION 1720 (PAPER)

FALLS AND INJURY

FALL PREVENTION NEEDS AMONG HOME CARE AIDES: LET'S LISTEN TO THEIR VOICES

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Home environments may present risks for falls not only among frail seniors but also their home care aides who provide housekeeping and routine personal care services. However, little is known about home care aides' risks for falls and their roles in fall prevention. The goal of this paper is to understand home care aides' experience with falls, and their current and potential roles for preventing their clients' falls. We conducted six focus groups with home care aides ($N=45$) as well as a focus group with home care supervisors in a large Midwest city. The home care aide participants were mainly age 50+ (64%) African-American women (95%). Approximately one third of the home care aides had slipped, tripped or fell in or around their clients' home in the previous 12 months. Injuries from falls, while infrequent, tend to cause long-term health and economic consequences for home care aides and their employers. Among the risk factors identified were: home environment (e.g., slippery floors), behavioral factors (e.g., rushing), the lack of equipment (e.g., shoes) or proper training (e.g., lifting), and home care tasks (e.g., bathroom cleaning). Home care aides are already playing critical roles in preventing falls among seniors by observing clients and their life space and taking necessary actions. We recommend (1) providing home care aides with additional information on clients and their home environment prior to the first home visit to allow precautions, (2) enhancing hands-on training, and (3) involving home care aides in fall prevention for frail home-bound seniors.

FACTORS INFLUENCING OUTCOMES OF AN EVIDENCE-BASED FALLS PREVENTION PROGRAM FOR TEXAS SENIORS

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Falls among older adults are associated with direct costs exceeding \$19 billion, compromised quality of life, increased dependency, and institutionalization. A Matter of Balance volunteer lay leader program (MOB/VLL) is an evidence-based falls prevention program designed to raise awareness of fall risk factors, introduce exercises for balance and strength, and empower informed choices about daily living. The purpose of this study is to investigate relationships between demographic and geographical factors associated with programmatic outcomes. Pre- and post-test data were collected from 1,272 Texas seniors enrolled in MOB/VLL. Structural equation modeling was used to examine relationships between variables of interest. Multiple imputation was performed to handle missing data. Direct and mediating relationships were examined using a model derived from evidence-based practice ($X^2/df=2.57$, CFI=0.960, TFI=0.905, RMSEA=0.037). Results indicate demographic and geographical variables are significant antecedent factors to health outcomes. The number of sessions attended by participants was directly related to decreased falls ($\beta=.014$, $P<.001$) and interference with daily activities ($\beta=.071$, $P<.002$), and increased number good physical ($\beta=.216$, $P<.001$) and mental days ($\beta=.151$, $P<.001$). Being male was correlated with increased falls ($\beta=.066$, $P<.05$). Residing in areas with higher rates of seniors was correlated with increased physical activity ($\beta=1.778$, $P<.05$). Residing in rural communities ($\beta=.134$, $P<.001$) and being a racial/ethnic minority were correlated with increased interference with daily activities ($\beta=.287$, $P<.001$). Increased understanding of factors associated with program success in different populations can assist practitioners to expand program offerings to diverse populations, assess programmatic costs, and examine long-term effectiveness of these programs.

UNDERSTANDING THE LONG TERM CONSEQUENCES OF INJURY: MODELING SURVIVAL DURING AND AFTER SENTINEL INJURY EPISODES

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Despite a precipitous drop in injury rates over the past 30 years, little progress has been made in reducing the injury rate among older adults, with 40% of injury-related hospital visits now made by adults aged 65 years and older. Compared with younger populations, older adults sustaining an injury experience increased risk of poorer outcomes, including death. Poorer outcomes are largely thought to reflect the complexities of managing traumatic injury among a subpopulation with higher rates of preexisting comorbidities and reduced physiological reserve. However, because research to date has focused primarily on event-specific outcomes rather than long-term consequences of an injury episode, less is known about the impact of injury on older adults surviving the initial injury episode. In response, this study employed survival analyses using multiple years of data from the Medicare Current Beneficiary Survey to estimate the marginal effect of sentinel injuries on the hazards of institutionalization and death, after adjusting for differences in sociodemographic characteristics, prevalent comorbidities and individual health behaviors. Findings suggest that hazard rate of death increases by roughly 50% over the long-run for those individuals experiencing a sentinel injury relative to otherwise similar persons without serious injury. Alternatively stated, survival time among individuals experiencing a sentinel injury event is reduced by about 25% in comparison with similar adults without serious injury. Results from this analysis suggest that despite the apparent successful medical resolution of serious injury among older adults in some instances, the long-

term consequences may continue long after injury-related healthcare use has ceased.

SESSION 1725 (SYMPOSIUM)

GETTING TO THE NITTY-GRITTY: REPLICATING HEALTHY AGING PROGRAMS ACROSS THE US

Chair: K. Braun, *Public Health, University of Hawaii, Honolulu, Hawaii*
Discussant: N. Whitelaw, *National Council on Aging, Washington, District of Columbia*

Chronic disease prevalence in the US continues to increase, especially among older adults, contributing to increasing health care costs. A number of health promotion programs have been developed and shown through randomized controlled trials to reduce chronic conditions and their risk factors. The US Administration on Aging launched an initiative to support the replication of evidence-based health promotion programs, and programs now are operational in 26 states. The purpose of this symposium is to present the experience of four states—Texas, Hawai'i, Maryland, and Maine—in choosing, adapting, implementing, monitoring, and evaluating A Matter of Balance, EnhanceFitness, and the Chronic Disease Self-Management Program. Each of the state speakers will describe the state's experience, present evaluation findings, and discuss its major successes and challenges. Findings will be useful to: service providers concerned about the intricacies of adapting evidence-based programs to fit their clients; researchers concerned with monitoring fidelity of delivery and client outcomes; and administrators and policy makers concerned with sustaining programs after grant funding is discontinued.

REPLICATING AND SUSTAINING ENHANCEFITNESS IN HAWAII

K. Braun, M. Tomioka, *Public Health, University of Hawaii, Honolulu, Hawaii*

Healthcare costs increase with age. EnhanceFitness (EF) is an exercise program specifically designed to increase the strength, flexibility, and balance of older adults. Controlled trials show that participants who attended at least one EF class per week realize physical benefits and reduced healthcare costs. As part of AoA's Healthy Aging initiative, Hawai'i replicated EF, most successfully on the island-county of Kaua'i. We present our experience replicating EF. Seniors attending at least weekly are showing significant improvement in measures of upper body strength, lower-body strength, balance and agility. Our estimated investment-to-return ratio is 1-to-2, i.e., for every dollar invested, \$2 should be saved in averted healthcare costs. Still, program managers are struggling to find ways to sustain the program, either through new grant funds or reimbursement. Discussion of our successes and challenges should assist other states that are replicating, or hope to replicate, evidence-based health promotion programs for elders.

LESSONS LEARNED: MARYLAND'S LIVING WELL PROJECT AND THE CHALLENGES OF IMPLEMENTING AND SUSTAINING EVIDENCE-BASED PROGRAMS

D.M. Cox, D. Wagner, E. Takagi, *Health Science, Towson University, Towson, Maryland*

Maryland's Living Well Project, which has been implemented in six regions, uses Stanford's Chronic Disease Self-Management program to foster healthy behavior among older adults and encourages participants to take charge of their own health. The Center for Productive Aging at Towson University, partnered with the Department on Aging to evaluate the project. We have surveyed over 750 program participants to collect baseline data and completed follow-up surveys for more than half of those who completed the course to assess the extent to which the program has influenced their personal behavior. In addition, we have interviewed program managers and peer leaders to conduct a process evaluation of the program. In this session inter-county differences in terms

of participation and organizational factors that related to participation will be discussed. We will also discuss the partnerships associated with implementing the project and offer recommendations for coordinated efforts that ensure program sustainability at the local level.

BUILDING STATE-WIDE CAPACITY FOR FALLS PREVENTION PROGRAMS: TEXAS FALLS PREVENTION COALITION

M.G. Ory¹, M.L. Smith¹, A. Wade¹, C. Mounce¹, R.A. Larsen¹, C. Quinn¹, R. Gibson³, R. Parrish², 1. *School of Rural Public Health, Texas A&M Health Science Center, College Station, Texas*, 2. *Capital Area Council of Governments, Austin, Texas*, 3. *Brazos Valley Area Agency on Aging, College Station, Texas*

Falls can have detrimental consequences for the health and functioning of older adults. This paper describes a state-wide effort to build capacity for disseminating A Matter of Balance (AMOB), an evidence-based program for reducing fall risks. AMOB is being implemented through the Texas Association of Area Agencies on Aging (AAA) with support from the Texas Department of Aging and Disability Services. Analyses are based on a central database of participant and organizational characteristics describing program reach and adoption. Implemented in 230 of the 254 Texas counties, there are now 76 master trainers and 286 lay leaders who have offered over 115 classes to 1690 participants. Centralized training is an effective way to quickly build capacity, enabling the implementation of a successful state-wide evidence-based program within two years. Working through the local AAAs is critical for achieving broad state-wide coverage and providing a forum for promoting program fidelity and sustainability.

REPLICATING AND SUSTAINING EVIDENCE-BASED PROGRAMS STATEWIDE IN A RURAL SETTING THE MAINE EXPERIENCE

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Living Well for Better Health (Stanford University's Chronic Disease Self-Management Program) and A Matter of Balance Volunteer Lay Leader programs were disseminated statewide to improve the health and reduce the fear of falling among older adults in Maine. This was accomplished through a partnership between the Maine Office of Elder Services, the Maine Center for Disease Control, MaineHealth's Partnership for Healthy Aging, and local partners around the state. Local partners include Area Agencies on Aging, Healthy Maine Partnerships, and healthcare organizations. Since 2006, over 1030 people have participated in these two programs. In this session, we will discuss how these programs were implemented in Maine, lessons learned, and present findings from the programs including Living Well for Better Health's Pre-survey and 6-month post survey data and results from a program sustainability survey for the A Matter of Balance/ Volunteer Lay Leader program. Finally we will discuss recommendations for sustaining Evidence-Based programs in a rural state like Maine.

SESSION 1730 (POSTER)

HEALTHCARE SYSTEMS

MEDICARE PRESCRIPTION DRUG BENEFIT: IMPACT ON OLDER PERSONS WITH A MENTAL ILLNESS

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Prescription drugs are an essential part of medical treatment and play an increasingly important role in health care. However, restrictions and requirements imposed by Medicare prescription drug plans can create barriers to medication access for older persons with a mental illness and can impact medication compliance. This exploratory study examined

the effect of the Medicare prescription drug program on access to psychotropic medications among older adults with a mental disorder. Data were collected from 11 community agency staff members working with persons aged 55 and older with a mental illness who access their medications through the Medicare prescription drug program. Qualitative, semi-structured interviews were utilized to determine the perception of staff of the problems and challenges their older clients face as a result of the program. Data were analyzed using NVivo. The results indicate that medication compliance varies, and is affected by requirements and restrictions imposed by the plans. These findings suggest that access to psychotropic medications can be inhibited by the overall structure of the Medicare prescription drug program. The most common prescription medication access barriers encountered by older persons with a mental illness under Medicare drug plans are the coverage gap, formulary restrictions, and the low income subsidy application process. Additionally, older persons with a mental illness did not understand the program, which could lead to difficulties accessing necessary medications. Community agency involvement was found to be a critical factor in facilitating access to medications for older persons with a mental disorder.

CONFLICT, CULTURAL MARGINALIZATION, AND PERSONAL COSTS OF FILIAL CAREGIVING IN MEXICAN AMERICAN FAMILIES

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PURPOSE: To investigate family conflict and cultural marginalization as predictors of perceived personal costs associated with filial caregiving in Mexican American families. **RATIONALE:** Although family conflict has been included in several caregiving studies, it has never been studied in conjunction with cultural marginalization in Hispanic families. Similarly, the role of acculturation as a factor affecting caregiver well-being has been studied, but not in the context of family conflict, and never with marginalization as a measure of acculturation. **HYPOTHESES:** 1. Family conflict will be positively correlated with perceived personal costs of caregiving; 2. Cultural marginalization will be positively correlated with personal costs of caregiving, but such will not be the case for measure of cultural orientation. 3. Cultural marginalization will mediate the effect of family conflict on the perceived personal costs of caregiving. **DATA COLLECTION:** Interviews with 47 Mexican American filial caregivers residing in Colorado. Cultural orientation and cultural marginality were measured using Scales 1 and 2 of the revised Acculturation Rating Scale for Mexican Americans. **RESULTS:** Correlational analysis supported Hypotheses 1 and 2. Testing Hypothesis 3 was guided by Baron and Kenny's (1986) analytical strategy for establishing the role of a mediating variable using regression analysis: First, cultural marginalization was regressed on family conflict. The standardized regression coefficient indicated that family conflict was significantly related to cultural marginalization ($\beta = .513$, $p < .001$). Higher levels of family conflict were predictive of higher levels of cultural marginalization. Second, hierarchical regression used. In Step 1, the measure of personal caregiving costs was regressed on family conflict ($\beta = .387$, $p < .01$). This association was significant, with higher levels of family conflict predicting higher levels of perceived personal caregiving costs. In Step 2, cultural marginalization was added to the equation. Support for the mediation function of cultural marginalization was found in that the effect of family conflict, while still significant, decreased when the variable of cultural marginalization was added to the equation (β was .513 for Step 1 and .387 in Step 2). The R^2 for the full equation was .339, with a significant change in R^2 from Step 1 to Step 2. Cultural marginalization accounted for an additional 22% of the variance in personal costs of caregiving. **DISCUSSION:** Practice implications for mental health professionals working with Mexican American caregivers are presented, as are study limitations and suggestions for future research.

INEQUITABLE ACCESS TO HEALTH SERVICES FOR OLDER ADULTS WITH DIABETES: POTENTIAL SOLUTIONS ON A STATE LEVEL

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This paper presents results of an existing data study investigating potential barriers for diabetic older adults to access health care. The focus was to investigate the complexities of disproportionate health access, guided by Andersen's Behavioral Model of Health Utilization. The research questions were: 1) Are there any significant relationships between State external environment factors, and individual level demographic, social structure, enabling resources, health needs and health utilization variables for diabetic older adults? 2) Can these relationships explain health disparities over 12 years for diabetic older adults? The study was a longitudinal, trend study with a two-nested-level structure, testing a multilevel model. It used secondary data for 12 cohorts gathered from the BRFSS. Four additional sources of data were used for State information. A sample of 122,383 individuals representing all 50 States in the USA and DC were used to test the model. The results indicated diabetic adults most at risk of not utilizing health resources are those without a high school diploma, health plan or personal doctor, who are self-employed, Hispanic, separated from a spouse, with cost as a barrier to care, and living in rural areas. Adults living in States with higher percentages of minority populations and people in poverty, and those living in health shortage areas, are also more at risk. Inequitable health care access is a concern for older adults in the USA. With education, job creation, available and affordable health care services, and health care insurance plans for all citizens, health disparities can effectively be addressed.

DISPARITIES IN CORONARY ARTERY DISEASE CARE AMONG INSURED WITH AARP MEDICARE SUPPLEMENT COVERAGE UNDERWRITTEN BY UNITEDHEALTH GROUP

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Research Objective: Discover if age-, gender-, race-, or income-related disparities in care for coronary artery disease (CAD) exist among the elderly with Medicare Supplement (i.e. Medigap) coverage. **Study Design:** Data were obtained from United Health Group's database of insureds who have Medigap coverage via AARP Medicare Supplement insurance. Patients were selected for the study if they had one or more medical claims with a diagnosis of CAD from July 1, 2006-June 30, 2007. Logistic regression analyses tested for age-, gender-, race-, or income-related differences in the likelihood of receiving an office visit, coronary angiography, or surgical intervention. The regression models controlled for socioeconomic, health status, type of supplement plan, and residential location. **Population Studied:** Of the 2.2 million Medigap insureds eligible for the study, 25.4% (570,711) had CAD. **Principle Findings:** Males were 60% ($p < 0.001$) more likely than females to have an office visit, but gender was not a significant predictor for the other services. Patients residing in high-minority neighborhoods were about 8% ($p < 0.001$) less likely to receive any services for CAD. Older individuals were significantly less likely ($p < 0.001$) to have invasive procedures (angiography and surgery). Patients residing in lower-income areas were about 9% ($p < 0.001$) more likely to receive any of the CAD services. **Conclusions:** Disparities in CAD-related care existed by age, income, and race, but the magnitude was relatively small (about 10%). Larger disparities were found by residential location and for those with mental health problems. UnitedHealth Group is designing interventions to address these disparities.

ACCESS TO CARE MANAGEMENT PROVIDERS FOR THOSE WITH MEDICARE SUPPLEMENT COVERAGE

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Research Objective: UnitedHealth Group (UHG) is working to provide higher-quality, better-care management to AARP member who have Medicare Supplement (i.e., Medigap) coverage underwritten by UHG. Although Medigap policy holders may utilize all Medicare-approved providers, care management will be facilitated by ready access to providers who already have an understanding of, and experience with, managed care methods. Such providers would be members of UHG's networks for other managed care products. This analysis examined access to UHG's network physicians and hospitals, and compared access for those residing in high-minority, low-minority, or standard zip-codes. **Study Design:** Three sources of data were used: the AARP Membership file, the UHG Provider Network file, and the 2000 US Census file. Network accessibility was measured as the percentage of insureds who resided in high-minority, low-minority, or standard zip codes where provider acceptability standards were met. Chi-square tests were used to compare access by minority status. **Population Studied:** 2.2 million AARP members with UHG's Medigap coverage. **Principle Findings:** Almost all ($\geq 99.0\%$) of the high-minority zip codes met acceptability standards in urban and suburban areas. There was a larger discrepancy in acceptability standards between high and low-minority zip codes in rural areas, but the population of Medigap insureds in high-minority, rural areas was small. Hospital access was the key issue. **Conclusion:** UHG AARP Medigap insureds have ready access to UHG network providers, regardless of whether they live in high-minority, standard, or low-minority zip codes. This will facilitate their and their physicians' abilities to better manage chronic conditions.

OLDER ADULTS IN SUBACUTE REHAB: AN EXAMINATION OF CO-EXISTING VISION AND DEPRESSIVE DISORDERS

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Older adults entering nursing homes for subacute care typically have multiple co-morbidities that influence the course and outcomes of their rehabilitation experience. Two common co-morbidities which are often under-diagnosed and under-treated are vision impairment and depression. This presentation examines the prevalence of vision impairment (both self-reported and measured acuity) and depression (PHQ-9), as well as their relationships with rehabilitation experiences among a sample of 55 older adults newly admitted to subacute care. Average age was 78.6, 71% were female, 74% non-Hispanic white, and 30% had mild levels of cognitive impairment (MMSE < 24). Average length of stay was 34 days, with an average of 15 hours of PT and 46 hours of OT received during their stay. Seven percent were transferred to a hospital and 16% fell during their subacute stay. Almost all (89%) returned to their community residences. Thirty-one percent met criteria for at least moderate levels of depressive symptomatology (PHQ-9=10+); 14% had acuities of 20/70 or worse, and 11% self-reported functional vision problems indicating low vision conditions. Poorer vision was significantly associated with higher levels of depressive symptomatology. Neither depression nor vision was related to length of stay, hours of PT or OT, or hospitalization. However, poorer vision was related to having a fall during subacute care, and depression was related to reporting greater pain, both of which have been found to negatively influence rehab outcomes. Implications for identifying and addressing depression and visual impairments in subacute populations are discussed.

THE PROGRAM OF ALL-INCLUSIVE CARE FOR THE ELDERLY [PACE]: LENGTH OF ENROLLMENT [LOE] AND REASONS FOR DISENROLLMENT

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As an alternative to nursing-home [NH] and other LTC, PACE provides community-based comprehensive care to dual eligibles certified at NH level-of-care. PACE's goals of providing high-quality service to enhance health and prevent institutionalization are aligned with payer and participant interests, with research suggesting PACE is successful. However, PACE assumes economic risk and could theoretically act to control risk not only through service quality but by selective admission and disenrollment practices observed in other managed care. We describe LOE and disenrollment reasons as performance benchmarks. Participant data (n=28,375), including continuous enrollment and disenrollment reasons, were recovered from DataPACE/DP 2.0 files for 33 programs under demonstration (pre-1997) and provider status. LOE was examined using SAS LIFETEST. To examine trends across successively remote LOE, we segment time into brief enrollments (≤ 3 & ≤ 6 mos.) and into time-to-disenrollment. Median LOE was 2 yrs, 11 mos.; 25th percentile = 14 mos.; 75th = 6 yrs. Mortality accounts for 42 & 45% at 3 & 6 mos., and increases (52, 70, 80 & 89%). A quarter occurred for unspecified reasons by 3 mos., and though decreasing continued at rates higher than specific non-mortality reasons. Moving and own-MD preference each account for 10% short-term. Quality/quality dissatisfaction (6%), financial reasons (4%), and non-compliance (6%) peak at 3 mos., and become rarer. In sum, disenrollment rates sensitive to participants' access or quality concerns are relatively small but largest early. Variability of LOE/reasons by site, site maturity, year, and other factors is discussed, as is CMS's monitoring role.

RESIDENTIAL AND HEALTHCARE TRANSITION PATTERNS AMONG ELDERLY MEDICARE BENEFICIARIES OVER TIME

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OBJECTIVE: Transitions between different residential living settings or healthcare settings represent vulnerable periods for older adults. An overall assessment of transition patterns including residential settings has yet to be described in the literature. The objectives of this study are to describe transition patterns across both residential and healthcare settings over time, to determine whether transition patterns are consistent across years, and to characterize complicated transitions. **METHODS:** This retrospective cohort study used the Medicare Current Beneficiary Survey (2000-2005). The sample was beneficiaries aged 65 and older (N=59,457). Annual transition patterns were expressed with a string created by combining four types of settings: C (community), F (facility), S (skilled nursing facility), and H (hospital). Weighted frequencies of transition patterns were compared across years. **RESULTS:** Both number and types of transitions remain consistent from year to year. About 7% of beneficiaries have three or more transitions in one year. The most frequent transition pattern was the transition to the hospital and back (CHC=11.5%, FHF=7.9%). Beneficiaries either residing in a facility or eventually transferred to a facility were the most likely to have complicated transitions. **DISCUSSION:** These results show stable and consistent patterns of residential and healthcare transitions in the Medicare population. Knowledge of transition patterns across both

residential and healthcare settings may provide a basis from which to understand healthcare utilization among older beneficiaries. The consistency of patterns may serve as a baseline from which to compare future patterns and design interventions targeted at specific transitions.

PERSONALISATION THROUGH INDIVIDUAL BUDGETS IN ENGLAND: DOES IT WORK FOR OLDER PEOPLE ELIGIBLE FOR PUBLICLY-FUNDED SOCIAL CARE?

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In England, individual budgets (IBs) have been seen as a way of personalising social care services by providing greater clarity about the resources available and more choice and control over how needs are met. The initiative was piloted among 13 local authorities and independently evaluated by the Individual Budgets Evaluation Network (IBSEN), using a range of research methods that included a randomised controlled trial of 959 service users. One of the key objectives of the evaluation was to identify whether the IB approach improved outcomes for people without increasing the overall cost of the care system. Overall, while very little difference was found between the costs of IBs and conventional services, holding an IB was associated with better social care outcomes, including higher perceived levels of control. IB holders appeared to welcome the support obtained and how it was delivered, compared to those receiving conventional social care services. While IBs seemed to have a positive impact on experiences among other user groups, the opposite was found for older people. IBs appeared to have a negative impact on psychological well-being of older people, at least in the ways these new arrangements were introduced and implemented during the pilot. The effect on older people did not appear to be associated with social care outcomes, and it was noticeable that this group did not experience the higher level of control with IBs reported by younger age groups. While this finding may be partly a cohort effect, it does indicate that 'one size does not fit all' which requires further research to understand the support needed by older people so they can enjoy the benefits of personalisation.

IMPLICATIONS OF POSSIBLE ELIMINATION OF FLORIDA OPTIONAL MEDICAID HOSPICE BENEFITS

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While 47 states and the District of Columbia currently offer Medicaid's optional hospice benefit, there was a recent recommendation in Florida to eliminate the optional hospice benefit from the SFY 2009-10 Medicaid budget. This study examined Florida Medicaid hospice expenditures and implications for elimination of the benefit using claims data for the state fiscal year (SFY) 2006-2007. The total hospice claim amount for 16,475 beneficiaries was \$223 million (\$117 for dually-eligible and \$105 for Medicaid-only). Types and amount of claims differed significantly between the dually-eligible and Medicaid-only beneficiaries. The nursing home per-diem payment accounted for 97.4% of hospice claims among dually-eligible beneficiaries compared to 50% among the Medicaid-only. Contrary to the projected savings of \$343.3 million from eliminating the benefit estimated by the Agency for Health Care Administration (AHCA), our analysis suggests a total saving of \$58.4 million. Elimination of the benefit would not translate into automatic cost-savings, since a patient with a terminal illness must still receive care absent hospice services. Although the major source of potential saving projected by AHCA is the nursing home per-diem component (75.39%), this cost will be merely shifted to non-hospice Medicaid nursing services. Claims for continuous home care and general inpatient care are also likely to transfer to Medicaid state plan services for home health, inpatient care, outpatient care, emergency room visits, and physi-

cian services. Elimination of Medicaid hospice benefits is unlikely to produce substantial savings to offset potential increase in acute and long-term care cost and burden on beneficiaries and their families.

CULTURAL COMPETENCE: AN EXAMINATION OF THE FACTORS THAT PREDICT THE PERCEIVED COMPETENCE OF HEALTH CARE PROVIDERS

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Cultural competence has emerged as a potential method to eliminate disparities in both health and health care. Preliminary studies have revealed an association with cultural competence and an improvement in the quality of health care services, increased client satisfaction, decreased rates of non-compliance, increased effectiveness of services (Campinha-Bacote, 1991), and an overall optimization of health care for clients (Betancourt et al., 2003; Frist, Kennedy, Obama, & Bingaman, 2006; Giger et al., 2007; U.S. Department of Health and Human Services, 2005; U.S. Office of Minority Health, 2001). In addition, research suggests that when clients are matched with a provider of the same race/ethnicity this interaction significantly aids in the reduction of health disparities (Komaromy et al. 1996; Saha, Arbelaez, & Cooper, 2003). This study examines several variables, particularly whether or not a client was matched with a provider of the same race/ethnicity, and the impact of these factors on how culturally competent clients perceive their health care providers to be. The respondents were 2,075 racial/ethnically diverse adults ages 50 and older that responded to a national telephone survey. Results indicate that self-rated health has an impact on how culturally competent Non-Hispanic White, African American/Black, and Hispanic/Latino clients perceive their providers to be. The results also indicate that being matched with a provider of the same race/ethnicity was a significant factor only for Hispanic/Latino clients.

IMPACT OF POST-ACUTE FOLLOW-UP CARE ON RE-ADMISSION

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Adverse events after acute care hospitalization are common, especially among the vulnerable elderly population. Physician follow-up visits are recommended by many professional societies, especially for specific conditions, to improve post-discharge outcomes and prevent costly ED visits and re-admissions, as well as mortality. However, little is known about patterns of receipt and timing of physician follow-up visits after acute care hospitalization among the elderly. This knowledge gap includes (a) if patients receive follow-up visits, and if so, (b) when (e.g., within recommended timeframes based on current condition-specific follow-up guidelines) and (c) with whom (e.g., primary care or specialist physician) such follow-up occurs. We used data from the Medicare Current Beneficiary Survey to examine predictors, timing, and consequences of follow-up care after acute, non-elective hospitalizations among the elderly. The results show that 22% elderly who had a follow-up visit with a physician were readmitted, compared to 47% of those who did not have follow-up care. Further analysis will examine costs associated with lack of follow-up care. These results suggest that policies to improve access to follow-up care can have a dramatic impact on outcomes.

SESSION 1735 (SYMPOSIUM)

INDIVIDUALIZED SERVICES TO PEOPLE WITH DEMENTIA IN CULTURALLY TRANSFORMED NURSING HOMES: THE POSSIBILITIES AND CHALLENGES FOR QUALITY OF LIFE AND TRUE COMMUNITY

Chair: R.A. Kane, *Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota*

Discussant: J. Rabig, *National Alliance of Small-House Nursing Homes, New York, New York*

Seniors with dementia present challenges to nursing home providers. Various strategies have been used to improve life and care for both persons with dementia and all others; one such approach is Dementia Special Care Units. Neighborhood or small-house models of nursing homes are a newer phenomenon emphasizing “normal” living environments, small-scale units, and individualized care plans. This Symposium explores the potential and the issues in transforming dementia care within the context of transforming nursing home care in general. Two papers are derived from research in at least 15 small-house nursing homes grouped in 3 residential neighborhoods in Ohio (Avalon-by-Otterbein). The houses are not specialized in dementia and their censuses reflect varying types and degrees of cognitive impairment with or without accompanying behavior problems. Rosalie Kane describes observed social engagement in the small-houses among various combinations of residents with or without dementia, staff and family, and discusses variations among frontline staff in their awareness of resident needs and preferences. Lois Cutler describes results of a post-occupancy evaluation study of the private rooms and bathrooms of each resident as well as the shared spaces in each small-house home it points to strengths and some limitations in the built environments and how they might be overcome. Elizabeth Drance describes an individualized assessment and care planning approach that facilitates successful transitions to nursing homes of individuals with dementia who also have been labelled as having severe behavioral or psychiatric problems. As discussant, Judith Rabig presents the process and content of a training approach for front-line staff that results in their development of deep responsive knowledge of the individuals with dementia in the community and ways to approach problematic behavior as puzzles to be solved.

COMPARING INTERACTIONS AND OUTCOMES FOR RESIDENTS WITH DEMENTIA IN SMALL-HOUSE AND TRADITIONAL NURSING HOMES

R.A. Kane, L. Cutler, *Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota*

We sampled residents with cognitive impairment in 15 10-person small-house nursing homes in 3 separate neighborhoods in residential areas, and a comparison group of residents in units in 3 traditional nursing-home settings. We performed resident interviews, interviewed a front-line staff member about each resident, and interviewed a family member by phone. We observed social interaction at various times of the day and evening, including weekends, and interviewed professional staff more generally about dementia services in their settings. Some frontline workers were highly knowledgeable about the residents and devised creative care approaches, but the extent to which staff knew residents ranged widely. The paper compares these small-house nursing homes to more traditional settings. It also describes the composition of each small house or unit (gender mix, age mix, disability mix, proportion of persons with dementia) and examines how that composition affects observed interactions and other resident outcomes.

INDIVIDUALIZED CARE PLANNING FOR PEOPLE WITH SIGNIFICANT NEED-DRIVEN DEMENTIA COMPROMISED BEHAVIORS - PART OF A SUCCESSFUL TRANSITION INTO RESIDENTIAL CARE

E. Drance^{1,2}, R. Watson², R. Sirett², 1. *University of British Columbia, Vancouver, British Columbia, Canada*, 2. *Vancouver Coastal Health Authority, Vancouver, British Columbia, Canada*

Increasingly, residential care homes in Canada feel overwhelmed in caring for people with dementia who have marked need-driven dementia compromised behavior. Elders who have been labelled as aggressive or agitated while in acute care settings are increasingly being refused by nursing homes. The Helping Elders Adapt in Residential Transitions Program uses the Need-Driven Dementia-Compromised Behavior model (Algaese, Beck et al 1996) to develop an individualized plan of care which decodes dementia related behaviors with the goal of helping residential care homes to understand the individual's care needs, and to feel more confident in their ability to support the person. Assistance and mentoring are offered to the residential care homes who accept the care of these elders. Data from the evaluation of this program, as well as the tools implemented to operationalize individual care planning will be shared.

POST-OCCUPANCY EVALUATION OF PRIVATE AND SHARED ENVIRONMENTS FOR RESIDENTS WITH DEMENTIA IN SMALL-HOUSE NURSING HOMES

L. Cutler, *University of Minnesota, Stillwater, Minnesota*

We present results from a post-occupancy evaluation of the private rooms and bathrooms and the shared spaces of all residents with dementia in 15 10-person small house nursing homes in 3 separate small-house neighborhoods; methods include behavioral mapping, checklist assessments of private and shared spaces, place-centered time scans, and environmental tracers. Results are compared to POEs for similar residents in traditional nursing homes. The small scale of the environment is associated with increased functioning and social activity for residents with dementia, enables staff to be efficient in providing care, and promotes social engagement among residents, staff, and family. Issues and problems were identified in managing disruptive behavior in the small-houses and in managing interpersonal issues when some people in the house deteriorate cognitively at a faster rate than others, and some have psychiatric co-morbidity. Ways are noted that staff could take better advantage of the richness in the built environment.

SESSION 1740 (PAPER)

LONG TERM CARE: COSTS AND POLICIES

LESSONS FROM THE NATIONAL LONG-TERM CARE SURVEY

D. Redfoot, *AARP-Public Policy Institute, Washington, District of Columbia*

The National Long-Term Care Survey has provided the most comprehensive data on trends related to disability and caregiving in the older population. These data are of particular importance in providing a basis for anticipating future demand for long-term services and supports to an aging population. This presentation will include recently reweighted trend data covering the entire 20 year history of the survey from 1984 to 2004. While disability rates have declined substantially during that time period, they have not declined uniformly at all levels of disability or among all population groups. Disability rates have declined very rapidly among those who reported limitations only in instrumental activities of daily living (IADLs). Rates have declined among those with higher incomes and education levels much more rapidly than among those with lower levels of education and incomes. Age, race, gender, and marital status are also important predictors of disability – though declines have occurred across such categories. The presentation will end with a discussion of some of the policy implications of these trends,

especially in the context of the current discussions in Congress related to healthcare and long-term services and supports.

FISCAL IMPACT OF A STATEWIDE PROGRAM TO TRANSITION RESIDENTS FROM NURSING HOME TO COMMUNITY

G. Arling¹, V. Cooke², T. Lewis², *1. IU Center for Aging Research, Indiana University School of Medicine, Indianapolis, Indiana, 2. MN Department of Human Services, St Paul, Minnesota*

We demonstrate how a long-term care re-balancing initiative could successfully shift resources from nursing home (NH) to community without adding to Medicaid costs. We projected the fiscal impact of a proposed statewide program to promote community discharges for nursing home (NH) residents early in their stays (90-120 days after admission) who otherwise would be expected to remain in the NH and become long stay. Counseling and alternative services would be offered to targeted residents who preferred to return to the community and whose health and functional characteristics indicated potential for a successful transition. Using data from the Minimum Data Set (MDS) and state administrative systems we estimated probabilities each month of transitioning from NH to community, returning to the NH or dying in either setting. We then constructed multistate life tables for projecting Medicaid conversion rates, number of person-months spent in the NH or community, and total Medicaid payments for 735 targeted NH residents transitioned to the community each year. We tested two scenarios – Transition Case and Base Case without the intervention. Making conservative assumptions about reach and costs, we estimated that after five years the transition program would result in 172,000 fewer annual NH days and net Medicaid savings of \$10 Million per year after covering administrative and community care costs. Even a modest community discharge intervention (60 resident transitions per month) could have a sizable impact on NH utilization and payments, while enhancing consumer choice. This modeling approach can be extended to other re-balancing initiatives.

THE COST OF INCREASING THE PROPORTION OF POST-ACUTE CCARE PATIENTS IN NURSING HOMES

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Post-acute care is becoming an increasingly important part of nursing home care. Spending for post-acute care has risen every year since 2000. For some nursing homes post-acute care has become an important niche. The decision to admit a larger proportion of post-acute care residents in nursing homes has important cost implications as the skilled and rehabilitative needs of post-acute patients are much greater than long-term care residents and the referral sources are very different. We study 949 NHs in California in 2005 and estimate the costs associated with increasing the percent of nursing home days that are funded by Medicare (%Medicare). Using Medicaid cost reports, the Minimum Data Set (MDS), Medicare enrollment files, Census data and the Area Resource File (ARF), we estimate a hybrid cost function, which in addition to outputs, wages, and ownership, includes %Medicare. We use instrumental variable (IV) techniques to account for the potential endogeneity of %Medicare and costs. On average nursing homes have 11% of nursing homes days paid by Medicare. The marginal cost of increasing the %Medicare one percentage point for an average cost nursing home is estimated as \$150,276 or about 2.6% of annual costs. Two-thirds of these additional costs go to rehabilitation, administration, RN expenses, and pharmacy. A comparison of ordinary least square (OLS) and two stage methods show a large endogeneity bias with OLS estimation. These findings suggest that as nursing homes admit a greater proportion of post-acute patients the distribution of costs is affected greatly.

REFORMING LONG TERM CARE: IS IT JUST FOR SMALL STATES, A REVIEW OF THE OHIO EXPERIENCE

R. Applebaum, S. Mehdizadeh, M. Deacon, J. Straker, *Miami University, Oxford, Ohio*

This paper reports results from a longitudinal study of long-term care utilization started in Ohio in 1993. The study tracks home care, assisted living and nursing home use trends over this time period. Public costs of long-term services through both the Medicaid and Medicare programs are included in the analysis. Demographic, service use and cost data from consumers in each setting are compared. Findings indicate that while Ohio has relied heavily on nursing homes as an approach to providing services to older adults with severe disability, these patterns are changing. In 1993, 92% of Ohio's long-term care Medicaid participants received services in nursing homes and 8% in the Medicaid home and community based care program. Results show that by 2007 that ratio had changed to 63% institutional to 37% in-home services. Although Ohio's ratio of institutional use is still higher than the majority of states, the system has indeed changed over time. This paper will provide an overview and analysis of the changes experienced by Ohio over the last 16 years.

MEDICAID FUNDING FOR ASSISTED LIVING CARE: A FIVE STATE STUDY

J. Fecondo, R. Newcomer, *UCSF, San Francisco, California*

Increasingly, assisted living facilities (ALFs) are seen as an alternative to nursing homes in the nation's long-term care system. Over the past ten years, the number of assisted living (AL) residents has more than doubled. This movement has been accompanied by states' growing willingness to shift Medicaid monies from nursing homes to ALFs. The most common mechanism for doing so is through Medicaid's Home and Community-Based Services (HCBS) waiver programs. At least 41 states have obtained federal HCBS waivers which cover AL services. In recent years, state AL laws have been amended to allow admission and retention of residents with greater care needs, thus increasing the population that can be served under this program. This study explores a number of issues relating to the Medicaid Assisted Living Waiver Program in five states. These states offer a cross-section by both geographic region and population size and are among those in which a significant percentage of AL residents are Medicaid eligible. This study includes a thorough review of relevant laws and policies and HCBS data, and interviews with a variety of stakeholders who were asked about vexing problems or ambiguities in the program and encouraged to offer opinions on how the program might better serve the needs of residents. This qualitative study provides a perspective on what is being done, the basis for the choices made, and the current problems and accomplishments.

SESSION 1745 (SYMPOSIUM)

PITFALLS, ROADBLOCKS AND THE OCCASIONAL GOLD NUGGET: ASSISTED LIVING RESEARCH WITH FEDERAL DATA SOURCES

Chair: *D. Potter, Ctr for Financing, Access and Cost Trends, AHRQ, Rockville, Maryland*

Discussant: *R. Newcomer, University of California, San Francisco, San Francisco, California*

Non-institutional residential care, such as assisted living (RC/AL), is an important community-based setting of care for persons in need of assistance with activities of daily living. Currently, differences in State requirements and a wide variety of services and amenities offered in RC/AL make it difficult for consumers (as well as researchers/ policy community) to obtain uniform information about RC/AL settings and populations. National surveys/censuses and federal administrative data can be used to make some national (and state) RC/AL inferences, but utilizing these data can be fraught with difficulties. The purpose of this symposium is to describe the major pitfalls/roadblocks in RC/AL esti-

mation using recent federal sources and to share with the research community findings that have emerged from efforts to characterize the national long-term care (LTC) population. The first paper focuses on the strengths and limitations of key federal data sources; special emphasis is given to sample design, survey operations and RC/AL estimation. The second paper updates estimates on the LTC population (published previously by Spector, et al. as a commissioned paper for the Institute of Medicine's report "Improving the Quality of Long-Term Care" (2001)) using more recent/alternative data sources and including estimates on RC/AL. Findings will be discussed in light of the current health policy reform debate. The last paper describes the new 2005 Medicaid Analytic Extract (MAX) data and discusses the challenges/potential solutions for using MAX to analyze home and community-based services including AL waiver use. The session concludes with discussant comments and floor discussion.

IS IT A HEALTH CARE FACILITY, A HOUSING UNIT OR A GROUP QUARTERS SETTING? IMPLICATIONS AND POSSIBLE DATA SOURCES

D. Potter, *Ctr for Financing, Access and Cost Trends, AHRQ, Rockville, Maryland*

Residential care/assisted living (RC/AL) is an important care option for people with health needs and functional impairments. With the capacity to serve over a million residents (Mollica et al, 2007), RC/AL is gradually approaching the size of the nursing home (NH) resident population (1.4 million; AHCA 2007). Currently there is no federally sponsored national survey for RC/AL analogous to the National Nursing Home Survey (plans are underway for one in 2010). Nor, are there federal RC/AL data collection requirements similar to those mandated for NH's and post-acute care. However, several national surveys/censuses and administrative data sources are available to tease out national/state RC/AL estimates, but utilizing these data can be fraught with difficulties. The purpose of this presentation is to describe these key federal data sources focusing on the strengths/limitations of the data. Special emphasis is given to sample design and survey definitional issues relevant to RC/AL estimation.

UPDATE: ESTIMATES ON THE LONG-TERM CARE POPULATION

D. Potter, *Ctr for Financing, Access and Cost Trends, AHRQ, Rockville, Maryland*

This presentation updates previous estimates on the U.S. long-term care (LTC) population initially published by Spector, Fleishman, Pezzin and Spillman as a commissioned paper for the Institute of Medicine's report "Improving the Quality of Long-Term Care" (2001). Using data from the American Community Survey (ACS) and federal administrative data sources this presentation, like the earlier report, will include estimates on the characteristics of the LTC population under the age of 65 (as well as over 65) residing in community and institutional settings. Unlike the predecessor report, estimates on the assisted living population will be included. Findings will be discussed in light of the current health policy reform debate.

USING THE MEDICAID ANALYTIC EXTRACT (MAX) TO IDENTIFY THE HCBS (ASSISTED LIVING) WAIVER POPULATION

K. McDonald¹, S. Karon², S. Lee³, J. Geppert⁴, L.A. Cubbins⁵, D. Potter⁶, *1. Center for Health Policy/Center for Primary Care and Outcomes Research, Stanford University, Stanford, California, 2. University of Wisconsin-Madison, Madison, Wisconsin, 3. University of California-San Francisco, San Francisco, California, 4. Battelle Memorial Institute, Arlington, Virginia, 5. Battelle Memorial Institute, Seattle, Washington, 6. Agency for Healthcare Research and Quality, Rockville, Maryland*

Assisted living (AL) services are a growing non-institutional long-term care alternative for many elderly. However, the lack of data available to reliably identify these services in the Medicaid claims has limited analyses to date. The new 2005 Medicaid Analytic Extract (MAX) includes data on dual eligible enrollment, Medicaid waiver enrollment, and expenditures for community-based long-term care (CLTC) services. This paper discusses the challenges and potential solutions for using these newly available data to analyze HCBS/AL services, including issues about data quality and uniformity, potential biases due to partial-year enrollment and enrollment in managed care plans, the availability of data from other payers (e.g., Medicare dual-eligible), and the accuracy of algorithms for identifying the population and sub-populations of interest. Estimates on the AL population are also compared to those reported by Mollica et al. (2005, 2007) in order to evaluate how well the MAX data benchmark to external sources.

SESSION 1750 (PAPER)

UNDERSTANDING AND PREVENTING ABUSE AND EXPLOITATION

JAPAN'S CERTIFIED SOCIAL WORKERS (CSW) AND ELDER ABUSE PREVENTION ACTIVITIES: THE MAJOR FINDINGS AND IMPLICATIONS OF A NATIONAL STUDY

T. Tatara¹, N. Tsukada², *1. Shukutoku University, Urayasu, Chiba, Japan, 2. Nihon University School of Business, Tokyo, Japan*

The Elder Abuse Prevention and Caregiver Support Law of Japan was enacted in November 1, 2005, and came into effect on April 1, 2006. One of the unique features of this law is that the law stresses the important role of Certified Social Workers (who are equivalent to ACSWs in the U.S.) in implementing the law's provisions. Amendments to Japan's Long-Term Care Insurance Law, which came into effect on the same day as the Elder Abuse Prevention Law, established nearly 4,000 Local Comprehensive Support Centers across the country and required local governments to assign certified social workers (along with public health nurses and nursing care managers) at all of these centers for the main purpose of handling elder abuse cases. In other words, 4,000 jobs of professional social workers were guaranteed by law for the first time in the history of Japanese social welfare. In the spring of 2008, the Japan Academy for the Prevention of Elder Abuse (JAPEA) and the Japanese Association of Certified Social Workers (JACSW) jointly conducted a national study of certified social workers working for the local comprehensive support centers. This presentation will discuss the major findings, along with their implications, of this study. The fact that a large proportion of the professional social workers were not very confident about the extent of their professional expertise in handling cases of elder abuse (65.1% for male social workers and 80.8% for female social workers) was a very big surprise to the researchers. The presentation will also describe some of the ways by which to strengthen the professional expertise of these professional social workers.

STAFF AND CLIENT MEASURES OF FINANCIAL EXPLOITATION OF OLDER ADULTS

K. Conrad¹, M. Iris², J. Ridings³, K. Langley¹, 1. *Health Policy and Administration, University of Illinois at Chicago, Chicago, IL, Illinois*, 2. *CJE SeniorLife, Chicago, Illinois*, 3. *Metropolitan Family Services, Chicago, Chicago, Illinois*

Until recently, elder abuse, especially financial exploitation, has received little systematic attention from researchers. Objectives. The purpose of this study was to develop staff observation and client self-report measures of financial exploitation of older adults. Methods. Items that were developed in through concept mapping and focus groups were administered to 227 substantiated clients and their corresponding elder abuse investigators (n=22) in a full-scale field test. This database, the largest on substantiated elder abuse clients to date, was used to estimate the psychometric properties of the two measures, i.e., staff observation and client self-report, using the Rasch item response theory model and traditional validation techniques. Results. The theoretical hierarchy that guided instrument development was tested empirically using Rasch person/item maps. Both staff observation and client self-report measures met stringent Rasch analysis fit and unidimensionality criteria; both had high person (internal consistency) and high item reliability; and met validity expectations. Significance. These measures were developed with modern psychometric techniques to aid in the sensitive and valid assessment of financial exploitation of older adults by both clinicians and researchers.

'IT'S ALL ABOUT COMPETENCY'; ADULT PROTECTION LEGISLATION AND THE BLACK BOX OF COMPETENCY ASSESSMENT

J. Harbison, S. Wildeman, S. Coughlan, A. Spady, E. Wexler, J. Karabanow, M. VanderPlaats, B. Gray, *Social Work, Dalhousie University, Halifax, Nova Scotia, Canada*

In Canada most adult protection legislation refers to the incompetency (or incapacity) of individuals as a prerequisite for unsolicited or unwanted interventions in an adult's life. In this paper we consider the implications of this focus on competency for the provision of assistance to older adults who are perceived as mistreated, neglected or self-neglecting. The authors, an interdisciplinary team including social workers, lawyers and sociologists, base their discussion on the findings of a recent study of three Canadian provincial jurisdictions. The methods used for the study were qualitative. Data collection included interviews and focus groups with diverse participants including health and social service professionals and members of seniors' organizations (N=55). In addition critical reviews of the relevant provincial legislation and policies were conducted. Findings indicate that despite the importance placed on competency in the adult protection services studied, the meaning of this legal status as interpreted by study participants, and the methods of assessment deployed, remain highly unsettled. The implications of these findings for the autonomy as well as the welfare of older people are discussed.

EXPLORING ELDER FINANCIAL ABUSE

P.B. Teaster¹, K.A. Roberto², J. Migliaccio³, 1. *Gerontology, University of Kentucky, Lexington, Kentucky*, 2. *Virginia Tech, Blacksburg, Virginia*, 3. *MetLife Mature Market Institute, Westport, Connecticut*

This presentation discusses key findings from a study of elder financial abuse. The study utilized Newsfeed articles from the National Center on Elder Abuse collected by the National Association of Adult Protective Services, as well as 12 electronic databases that indexed academic journals containing primary literature on elder abuse from 1998 through 2008 as well as trade publications from 2005 to 2008. Key findings suggest that the annual financial loss by victims of elder financial abuse is estimated to be at least \$2.6 billion dollars; elders' vulnerabilities and larger net worth make them a prime target for financial abuse; and the increased aging of the population, social changes, and technology

advances will lead to a dramatic increase in the opportunity for a growing level of elder financial abuse. Perpetrators of elder financial abuse are typically are people who have gained the trust of an elder. The presentation concludes with suggestions for intervention and prevention of this underrecognized, underreported, and under prosecuted phenomenon.

SESSION 1755 (SYMPOSIUM)

AGING WITH MULTIPLE SCLEROSIS: SUPPORTIVE HOUSING AND ASSISTED LIVING OPTIONS

Chair: J. Hyde, *Gerontology Institute, University of Massachusetts/Boston, Boston, Massachusetts*

Discussant: M. Campbell, *Department of Education, Washington DC, Alabama*

Of the nearly a half million people with Multiple Sclerosis in the United States, most are able to live independently and need relatively little support. However many others need help with both IADLs and ADLs. Because this need for services strikes people with MS at a much earlier age than the general population, there are currently over 100,000 people in the "baby boom" generation with MS who are facing the dilemma as a large wave of the population will be facing in the coming decades. In some ways this group serves as the "canary in the mine shaft" for the more general aging population. In other ways the needs of people with MS, with its variable array of symptoms, including mobility and cognitive impairments, incontinence, fatigue, heat sensitivity and depression, are somewhat unique. Also unique is that people with MS still may have school-age children, and may be facing many more years of disability than older people in need of support. Finally the high rate of divorce among those with MS further compounds the challenges they are facing. This symposium brings together results from three studies that address these issues. The studies take different approaches to identifying needs and preferences of people aging with Multiple Sclerosis, as well as options and funding sources available and lacking for this important population.

SUPPORTIVE HOUSING AND ASSISTED LIVING: QUALITATIVE STUDY OF PREFERENCES AND NEEDS AMONG A SAMPLE OF PEOPLE WITH MULTIPLE SCLEROSIS

A. Gottlieb, J. Hyde, *Gerontology Institute, University of Massachusetts/Boston, Boston, Massachusetts*

Similar to older adults in general, people with MS prefer to live at home even when confronting serious and increasing functional disability and physical challenges. Through qualitative interviews, substantially disabled people with MS described both resourceful approaches to retaining independence as well as substantial financial and bureaucratic barriers to obtaining needed resources to continue living at home. Participants typically had little information on supported residential options and seldom had explored options or made future plans. However, when asked to imagine an ideal supported residential community, participants identified features and services specific to MS as well as envisioning communities that included elements of universal design and "smart communities." Of greatest importance to participants were: private living units along with opportunities for socialization; proximity to social networks and familiar communities; availability of personal assistance; autonomy and choice; independence; and affordability.

AGING WITH MULTIPLE SCLEROSIS, HOUSEHOLD FINANCES, AND CONSIDERATION OF LONG TERM CARE SERVICE USE

M. Putnam¹, F. Tang², 1. *School of Social Work, Simmons College, Boston, Massachusetts*, 2. *University of Pittsburgh, Pittsburgh, Pennsylvania*

Overview: This paper analyzes data from a 2004 randomized sample survey of persons aging with MS (N=576). Research questions

addressed the relationships between: 1) financial and savings characteristics and disease status, and 2) household finances and consideration of use of LTC services and supports. Bi-variate analysis indicated average respondent age was 50, 79% female, 67% married, 33% employed, 63% had an annual household income of <\$69,999, and 50% reported total asset levels of <\$139,999. Severity of MS was positively related to perceptions of greater financial discomfort and standard of living decline. Predictors of saving and preparedness to pay for LTC included MS severity, household income and receipt of LTC planning information. Perceived likelihood of needing LTC services significantly predicted perceived likelihood of using 6 LTC services; financial preparation to pay for LTC or saving for retirement or other goals was not predictive of perceived likelihood of use.

CHALLENGES IN ASSESSING AND MEETING UNMET NEEDS FOR HOUSING FOR PERSONS WITH MULTIPLE SCLEROSIS

R.A. Kane, L. Cutler, *Health Policy & Management, School of Public Health, University of Minnesota, Minneapolis, Minnesota*

Advocates for and leaders in services to people with multiple sclerosis (MS) are interested in estimating the need for specialized housing for MS. Such estimations are very complicated because of the multiple way housing needs can be met across the disease trajectory, the various patterns in how the disease progresses, and the varying social support structures. Estimates also need to take into account quality of available housing. Housing needs differ among individuals and over the life span for specific individuals. This paper reviews the different approaches to housing for people with MS, including independent housing, assisted living, and nursing homes, and lays out distinctions between housing that meets the needs of people with disabilities and housing specific to people with MS. Using the catchment area of the Minnesota MS Society as an example, the paper discusses strategies for assessing housing adequacy in a single geographic area.

SESSION 1760 (PAPER)

CAREGIVING, STRESS AND COPING

COPING STRATEGIES FOR GRIEF AMONG ALZHEIMER'S CAREGIVERS: THE INFLUENCE OF FAMILIAL ROLES

J. Frank¹, A. Watts², 1. *Center for Aging and Community, University of Indianapolis, Indianapolis, Indiana*, 2. *University of Kansas, Lawrence, Kansas*

The purpose of this study was to investigate differences in grief between current spouse and adult-child caregivers of individuals with dementia. The results presented are data from a 2006-2007 statewide study of Alzheimer's family caregivers in Indiana (N = 378; 159 spouses, 219 adult-children). The primary measures of interest were the Marwit-Meuser Caregiver Grief Inventory (MM-CGI) and a coping questionnaire designed by Frank (2006). The MM-CGI has three subscales: Personal Sacrifice Burden (PSB), Heartfelt Sadness and Longing (HSL), and Worry and Felt Isolation (WFI). Multiple group confirmatory factor analysis indicated that both spouse and adult-child caregivers experienced similar levels of perceived stress, sadness, and worry. Strong invariance of this factor structure was achieved across the spousal and adult-child of caregivers indicating the grief construct is consistent for the two groups. However, the experience of grief between the two groups differed. The relationship between PSB and HSL was highly correlated in the spousal caregiver group, but these correlations were significantly attenuated in adult-children. In addition, regression analysis showed that coping strategies are not only different among spouse and adult-child caregivers, but can actually predict the levels of PSB and HSL. For example, spending time with friends predicted decreased levels of PSB and HSL. Findings indicate grief is experienced differently for spouse vs. adult child caregivers and that the nature of the relationship to the

person with dementia (e.g. spouse vs. adult child) may influence the coping mechanisms used.

FAMILY CONFLICT AND STRESS AMONG ADULT CHILD CAREGIVERS

M. Kwak, B. Ingersoll-Dayton, J. Kim, *University of Michigan, Ann Arbor, Michigan*

Adult children are likely to experience stress as they attempt to negotiate their parents' care. This study examines how care recipient impairment and family conflict affect caregiver stress when simultaneously considering demographic and family structural factors. Of particular interest is the impact of, gender composition of sibling networks when examining the relationship between family conflict and stress. Data on adult child caregivers with siblings were identified in the caregiver survey portion of the 2004 National Long-Term Care Survey (N=751). These respondents, selected from a national probability sample, were caregivers for persons aged 65 or older. Structural equation modeling was used to test a conceptual model that included three key constructs: care recipient impairment, family conflict, and caregiver stress. Also included in the model were contextual factors, such as gender composition of caregiving siblings. The model fit indices were acceptable (RMSEA=.049, CFI=.98). Results indicated that family conflict partially mediated the relationship between care recipient impairment and caregiver stress. The inter-relationships among care recipient impairment, family conflict, and caregiver stress were positively associated with one another. In addition, families in which siblings were the same gender were less likely to experience family conflict than were those in which siblings were both male and female. These findings suggest that the gender composition of the family caregiving network is an important variable that needs to be considered when examining caregiver stress and family conflict among siblings who are providing care to their parents.

FINANCIAL STRESS, POSITIVE AND NEGATIVE SOCIAL EXCHANGES, AND DEPRESSIVE SYMPTOMS AMONG OLDER ADULTS

H. Ahn, *SOCIAL WORK, UNIVERSITY OF WISCONSIN MADISON, Madison, Wisconsin*

Research demonstrates financial stress is associated with psychological well-being. Studies also evidence the role of social exchanges on the link between financial stress and well-being. There still remain many ambiguities, however, about the ways in which social exchanges are associated with life stress and depressive symptoms among older adults. What are the roles of social exchanges in the link between financial stress and depressive symptoms and are there any reliable differences in the relationships among the three factors between older men and women? I conduct a series of structural equation modeling analyses including multi-group analysis using Mplus version 5.2. Data are from the nationally representative Americans' Changing Lives study, for the subgroup of respondents (ages 60+) participating in the baseline (1986, n=1,669). Findings show that female older adults suffer more financial stress than male counterparts. Financial stress is significantly related to negative exchanges, and both financial stress and negative exchanges are predictive of elevated levels of depressive symptoms among male and female older adults. Positive exchanges, however, are not associated with financial stress in either group and they are marginally related to depressive symptoms only among male older adults. Overall financial stress has stronger effects on depressive symptoms among female older adults than male older adults. The mediating effects of social exchanges on the link between financial stress and depressive symptoms are more salient among male older adults. Findings demonstrate the importance of considering social exchanges in the understanding of the association between life stress and psychological well-being.

THE LONGITUDINAL STRESS-BUFFER ROLE OF INFORMAL AND FORMAL SUPPORT IN LATER LIFE

N. Chan¹, K. Anstey¹, T. Windsor¹, M. Luszcz², I. Centre for Mental Health Research, The Australian National University, Canberra, Australian Capital Territory, Australia, 2. Flinders University, Adelaide, South Australia, Australia

Introduction: We investigated whether type of instrumental support received – informal only, formal only or both informal and formal support – differentially buffered the harmful relationships between disability and depressive symptoms and life satisfaction over an eight-year period. The stress-buffer age-variation hypothesis (i.e., that the stress-buffer effects of social support strengthen in later life with increasing age) was also examined. **Methods:** We used multilevel modelling with three waves of data from a population-based sample of community-dwelling older adults (N=1961 at Wave 1). Time-invariant predictors were sociodemographic characteristics; social networks with children, relative and friends; and physical health variables. Time-varying predictors included marital status, cognitive status, functional limitations and type of support received. Dependent variables were depressive symptoms and life satisfaction. **Results:** Relative to no support, receipt of formal support in isolation moderated the negative association between increasing functional limitations and life satisfaction. Similarly, receipt of informal support only was associated with a weaker relationship between increasing functional limitations and depressive symptoms. Analyses also revealed that this second moderating effect strengthened with age. Finally, receipt of support was directly associated with greater depressive symptoms and lower life satisfaction, but only for individuals with few increases in functional limitations over time. **Conclusions:** Our findings highlight the complexity in the relationships between disability, received support and mental health. They indicate that instrumental support from both informal and formal sources has the potential to buffer the harmful effects of disability on mental health, and that these protective effects may strengthen in later life with increasing age.

THE EFFECTS OF SUPPORT RECEIVED ON SUPPORT OLDER ADULTS PROVIDE TO OTHERS

P.A. Thomas, *Sociology, Duke University, Durham, North Carolina*

Although studies have demonstrated the benefits of providing social support to others, few focus on what factors influence individuals to provide support. To the extent that older adults' support behaviors are the focus, research is typically in the form of cross-sectional studies of intergenerational relationships of reciprocity. The present study longitudinally examines support older adults provide to both family and friends, separating out the components of reciprocity as it is typically measured. Two waves of the North Carolina Established Populations for Epidemiologic Studies of the Elderly (EPESE) are used to examine these relationships with an analytic sample of 2,581 adults age 65 and older. Findings indicate that the number of types of support received from others significantly influences the number of types of support that older adults provide. Similarly, changes in support received significantly influence changes in the support older adults provide. However, the largest predictor of support provided is the support respondents gave at baseline. Poor health and older age significantly restrict the support older adults provide. African Americans, men, married individuals, and the more highly educated provide significantly more types of support to others.

SESSION 1765 (SYMPOSIUM)

CIVIC ENGAGEMENT OF THE YOUNG-OLD IN JAPAN AND KOREA: WILL THEY MAKE A DIFFERENCE IN RAPIDLY AGING SOCIETIES?

Chair: K. Katagiri, *Institute for Social Gerontology, Nipponkoa Welfare Foundation, Tokyo, Japan*

Discussant: G. Han, *Seoul National University, Seoul, Korea, South*

Like other developed countries at present, baby boomers in Japan and Korea are also reaching their retirement age. Moreover, both countries are facing rapid aging compared to other countries. Both societies used to be characterized by filial piety; however, drastic changes in family structure and norms have been observed in recent years. Purportedly, the younger generation is becoming increasingly individualistic and independent. At the same time, both countries are facing various inequalities in matters such as gender and residence, particularly in light of the recent recession. Such social inequalities could have detrimental effects on social participation. In this symposium, differences in social participation were examined: Who is more advantaged and who is more disadvantaged in relation to social participation? Katagiri et al. explored the differences between urban city and local city. They stated that disparities in residential areas were related to social participation. Han et al. analyzed the gender differences; men and women differ not only in terms of motivation of participation but also in the level of participation of various activities. Kim & Kang examined the effect of social participation in the young-old in Korea and indicated the moderating effect of marital status. Sugawara et al. focused on the generational differences; they pointed out different generations engaged in volunteer activities by different motivations. These studies revealed many disparities in social participation in the young-old and suggested the need for innovative policies in keeping with their motivations and characteristics. Creative ways to promote social participation will be discussed.

GENERATIONAL DIFFERENCES OF COMMUNITY ATTACHMENT AND COMMUNITY ACTIVITY PARTICIPATION: STUDY IN A SUBURBAN CITY OF TOKYO

I. Sugawara, H. Murayama, S. Yoshie, T. Wakui, R. Arami, *Institute of Gerontology, The University of Tokyo, Tokyo, Japan*

The aim of this study was to examine the generational differences of the attitude toward community and the patterns of community activity participation. The role of community in people's lives and relationships among neighbors have been changed in the last half of the last century. Especially the changes have been drastic in suburban communities of metropolitan areas. These changes might produce generational gaps of why and how people participate in community activities. A mail survey was conducted with 4123 residents aged 20 and older in a suburban city of Tokyo, Japan. The results showed that older people participated in community activities when their social networks were embedded in their community, whereas young-olds and younger generations engaged in community activities when their psychological connectedness with the community was high. These results suggested that different motivations might be working in the process of community participation of older and younger generations.

GENDERED SOCIAL PARTICIPATION OF KOREAN YOUNG ELDERLY

G. Han, *Seoul National University, Seoul, Korea, South*

The purpose of this study is to examine gender differences in the pattern of social participation and related factors of Korean young elderly residing in cities. Data were gathered from 1700 Korean men and women (men=850, women=850) aged 50-69 in Seoul and Kwangju, a city located in southern part of Korea. Elderly men and women differ not only in terms of motivation of participation but also in the level of participation of various activities. Women are more likely to participate in the social activities out of 'relational' motivation while men

emphasize more 'individualistic' motivation. Women actively participate in informal social network activities whereas men tend to participate in more formally organized social activities. The possible ways to encourage the participation of each gender on various activities and to promote healthy integration of gendered activities will be discussed.

DISPARITIES IN CIVIC ENGAGEMENT: WHO IS MORE SUCCESSFUL IN AGING IN PLACE?

K. Katagiri¹, I. Sugawara², *1. Institute for Social Gerontology, Nipponkoa Welfare Foundation, Tokyo, Japan, 2. the University of Tokyo, Tokyo, Japan*

Katagiri et al. examine the differences in social participation between urban and rural cities. We conducted a random sampling survey in the cities of Tokyo and Okayama in 2008. The rate of social participation in Okayama was higher than that in Tokyo. Logistic regression analyses were conducted to explore the related factors of social participation. Though residence area and health conditions were related to social participation, other demographic factors had no effect. Network factors, social participation history, and motivation for undertaking social activities were related to social participation. If people knew the persons involved in social activities, they were more involved. If they had experienced social activities in their youth, they were more participative. People with a keen motivation to participate in rural activities were more committed. However, some inequalities emerged when people were divided into groups. Potential disparities among the young-olds in social participation will be discussed.

SOCIAL PARTICIPATION, MARITAL STATUS AND MENTAL HEALTH OF KOREAN YOUNG ELDERLY

J. Kim^{1,2}, H. Kang², *1. Institute on Aging, Seoul, Korea, South, 2. Seoul National University, Seoul, Korea, South*

The purpose of this study is to examine the effect of social participation on mental health of Korean young elderly men and women. Previous studies suggested the positive relationship between social activities and mental health in later life but there is no systematic empirical studies focused on young-old. Therefore, this study aims to examine the effects of social participation on mental health of Korean young elderly. This study also focuses on the effects of marital status on social participation and explore its moderating effect. Data were gathered from 1700 Korean men and women aged 50-69. The results show the positive relationship between social participation and mental health. The level of social participation varied by marital status and the relationship between social participation and mental health differs by marital status. The important meaning of social participation determining mental health of young elderly and various impacts of marital status will be discussed.

SESSION 1770 (POSTER)

CREATIVE AGING

CHANGES IN VOLUNTEERING IN LATER LIFE BETWEEN 1992 AND 2006: THE IMPACT OF INDIVIDUAL AGE AND HISTORIC TIME

M. Broese Van Groenou, T. Van Tilburg, *VU University, Amsterdam, Netherlands*

Given population aging and the productive potential of older people, it is important to examine how individual aging as well as societal developments affect social engagement in later life. The present study examined changes in volunteering in later life among 60-85-year-olds between 1992 and 2006. Data are used from the Longitudinal Aging Study Amsterdam, an ongoing study on older people in the Netherlands. Data from six waves between 1992 and 2006 are used. Multilevel logistic regression analyses were conducted separately for men and women. Women were less often involved in volunteering than men in all age groups, but showed the same pattern of decline with age and an increase

over time. Interaction effects between age and time were not significant. Compared to 1992, older adults in 2006 were higher educated, worked more often and had larger networks, but reported more health problems, were less religiously involvement and were more often divorced. After adjustment for these individual differences, the net effects of age and time were still significant. It can be concluded that volunteering decreases with aging due to decreasing health. The finding that older adults are more socially engaged in 2006 than in 1992 is in part due to their higher educational level and larger personal networks, but it also reflects the more positive view on aging within society. Still, the larger health problems of the future older generations are a potential threat to their level of social engagement.

UNDERSTANDING PAST ACHIEVEMENTS AMONG CENTENARIANS: TRACKING THE PATTERNS OF SOCIAL AND PRODUCTIVE ACTIVITIES

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Previous research supports participation in social and productive activities and its positive effects on well being in later life (Baker, Cahalin, Gerst & Burr, 2005). Centenarians often represent the population that has aged successfully. This study assessed the patterns of engaged lifestyle activities (e.g., volunteering, traveling, and public speaking) for centenarians of the Georgia Centenarian Study. A total of 137 centenarians and near centenarians (i.e., 98 years and older) participated in this study. Self reports of cognitively intact participants (i.e., MMSE > 16) were used for analysis. Descriptive statistics suggested high frequencies of engaged lifestyles such as public speaking, learning a foreign language throughout the life span. Forty percent of all centenarians reported having learned a foreign language, 43 percent of the participants reported continuing education. About half of our participants had volunteered at events, 37 % of them between ages 90 and 99 years. More than 60 percent of the centenarians reported travelling to a foreign country and 40 percent of the participants took trips within the country between the age of 90 and 99 years. Chi square tests suggested significant group differences in past achievements based on demographic characteristics. Significant ethnic differences ($\chi^2 = 8.71$, $p < .01$) were found with 45% Caucasian Americans reporting learning a foreign language as compared to 15% African Americans. Significant residential differences were found for those participants who reported continuing education ($\chi^2 = 6.95$, $p < .05$). No significant group differences were reported for volunteering and public speaking activities.

THE EXPRESSIVE BODY: EXPERIENCES OF CREATIVITY IN DEMENTIA

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While there is emerging evidence that involvement in creative activity provides important health benefits for older adults, less is understood about the importance of creative involvement for people with dementia. We report on findings from a qualitative study that has explored as an overall question how people with dementia understand and cope with the challenges of everyday activity, focusing in particular on what they find most meaningful. The importance of "doing something creative" has emerged as a central theme in this work. Using ethnographic methods, we have conducted repeated interviews and participant observation with fifteen people diagnosed with mild to moderate dementia who are living independently in the community, either alone or with family. Six of the participants have shared their experiences as visual artists and musicians. While the details of their situations are distinct, interpretive phenomenological analysis has revealed that for all of them, creative expression has opened up possibilities to engage with the world and to enjoy the smooth flow of the unencumbered body. To explore

these findings, we will present two narratives, highlighting the commonalities and distinctions in these different experiences of creative expression. We will discuss implications of these findings for understanding experiences of dementia and for identifying new ways of supporting people with this disease.

DO VISUAL ARTS PROGRAMS BENEFIT OLDER ADULTS LIVING WITH DEMENTIA? A SYSTEMATIC REVIEW

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Research studies indicate that meaningful creative activities can benefit individuals, including those living with dementia (Hannemann, 2006; Kinney & Rentz, 2005; Marshall & Tibbs, 2006; Rusted, Sheppard, Waller, 2006). The objective of this systematic review is to examine the effects of visual arts activity programs with older adults living with dementia. The intervention involves visual arts activity programs that are intended to affect the cognitive, emotional, and/or social domains (Moore, Geboy, & Weisman, 2006, pp. 88-96). The expected outcome is increased communication and expression for older adults living with dementia. The systematic review located seven research studies utilizing visual arts with individuals living with dementia (Bober, McLellan, McBee, & Westreich, 2002; Brownell, 2008; Kinney, & Rentz, 2005; Rusted, Sheppard, & Waller, 2006; Seifert, 2000; Seifert & Baker, 1998; Stewart, 2004). One study is a randomized controlled trial, several of the studies are quasi-experimental, and one is a case study. Their analyses include quantitative and qualitative methods. One study involved an intervention led by social workers (Bober, et. al., 2002). The results of several of the studies show a few significant differences between outcomes with visual arts programs when compared with other activities. The findings of this systematic review indicate that further studies on using visual arts with individuals living with dementia may provide more information on whether visual arts activity programs constitute a useful intervention.

CREATIVITY AND AGING: THE EFFECT OF AGE ON COMPONENTS OF SELF-PERCEIVED CREATIVITY IN LATER LIFE

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Creative activity in older adults has many positive effects. Creativity plays an important role in coping with challenges, improving emotional functioning, and facilitating independence. Creativity is comprised of a complex set of traits, skills, and capacities. Individual attitudes, such as self-perceptions of creativity, are particularly crucial to understand given their link with self-efficacy and their prospective impact on behavior. The purpose of this study was to examine self-perceptions of different components of creativity in later life. This study examined self-perceptions of creativity among three age groups of older adults: 50-59 (n=20), 60-69 (n=20), and 70-79 (n=22), as measured by the separate subscales of the Scale of Creative Attributes and Behaviors (SCAB). The SCAB measured five components of creativity: Creative Engagement, Creative Cognitive Style, Spontaneity, Tolerance, and Fantasy. Results indicated significant differences between age groups on the Creative Engagement ($F(2, 59) = 4.11, p < .05$), Spontaneity ($F(2, 59) = 3.24, p < .05$), and Tolerance ($F(2, 59) = 3.51, p < .05$) subscales. Individuals 60-69 scored significantly higher on the Creative Engagement subscale than those 70-79. On the Spontaneity subscale, participants 50-59 scored significantly higher than individuals who were 60-69. On the Tolerance subscale, participants 70-79 scored significantly higher than those 60-69. Findings suggest that older adults do not perceive declines across all domains of creativity in later life and that perceptions of creativity involving tolerance to new ways of thinking may be enhanced. These preliminary results have positive implications for assisting adults with adaptively managing the stressors of aging.

THE MEANING OF CREATIVE ACTIVITIES, GENERATIVITY, AND ATTITUDES ON LIVING A LONG LIFE

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The purpose of this study was to examine the relationship between creative activities and generativity in middle and late life, and between generativity and attitudes toward living a long life in males and females from 40-90. 80 participants filled out a questionnaire describing their creative hobbies, including how long they had engaged in those hobbies, and how often they engaged in them. They completed the Creative Meaning Scale, a 3 factor questionnaire of creative hobbies, assessing their spiritual meaning, the feelings of usefulness they generate, and the extent to which they provide feelings of mastery or recognition from others. Participants also completed the Khatena-Morse scale of overall creativity, the Loyola Generativity scale, and the Prolongevity scale. The latter is a recently developed scale designed to measure attitudes toward living to be very old. It has two factors: hope about living a long life, and dread of living a long life. Correlational analyses revealed few age differences, except that older participants were less hopeful about late life. Participants who spent more time creating and who had been creating longer scored higher on all three factors of Creative Meaning, but not on overall creativity. Regression analysis was used to examine the extent to which creative activities predicted generativity. It was found that recognition/mastery and overall creativity predicted generativity. Desire to live a long life was predicted by generativity, and negatively by age, but was not directly affected by overall creativity or creative meaning. Individuals high on overall creativity dreaded old age less.

WHISTLING IN THE DARK: HUMOR IN AN ACTIVE ADULT COMMUNITY THEATER PRODUCTION

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Negative perceptions of aging can create concerns about anticipated losses. This poster presents a content analysis of a theatrical spoof on life in a nursing home and examines how seniors in an active adult community use humor to deflect anxiety about advancing age. The use of humor to mitigate fears of the unknown is well documented in psychological literature. Freud (1928) suggested that humor is a defense mechanism and Rollo May (1953) proposed that humor may help one put a 'distance' between oneself and a perceived stressor. Written and directed by a twelve-year resident of an active adult community and member of the drama club, the show was a musical revue with flashbacks from the life stories of six fictitious residents, interspersed with scenes from the day-to-day life in a stereotypical nursing home. A mixed-age group of 78 residents made up the cast and production crew. The theme of the play was expressed in the first line of the script, "Aging is not for sissies." Using excerpts from the script, illustrated with photographs of the production, the focus of the poster is on humor as a coping strategy for adults 55 and older. This research is part of a larger NIA study, Stigma and the Cultural Context of Residential Settings for the Elderly, which explores how older adults react to stigmatizing traits in themselves and others, supported by the National Institute on Aging RO1 AG028469 (P.I. J. Kevin Eckert, Ph D.)

NEVADA'S TRUE GRIT PROGRAM: A HEALTHY AGING APPROACH FOR ELDERLY PRISON INMATES

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The average age of the American prison population is increasing. Almost 4% of Nevada's current prison population is 60+ years of age.

The number of inmates nationally in federal and state prisons aged 55+ years grew 33% from the years 2000-2005; an overall 9% increase. Due to factors such as longer adjudicated sentences, longevity, and more stringent parole policies, more inmates will be spending their remaining later years in prison. True Grit, a Senior Structured Living Program, costing Nevada \$0, began in 2004 at the Northern Nevada Correctional Center in order to promote a more positive aging experience for their inmates. True Grit is the only known structured living program of its kind nationally that humanely meets the unique physical, medical, psychological, and spiritual needs of men growing old in prison. Since its inception, 137 older adult men have been True Grit members. True Grit program activities include: physical exercise (e.g., beach volleyball), music (e.g., choral groups and musicians) and literature appreciation (e.g., poetry writing), diversion activities (e.g., puzzles, crocheting, beadwork), video and pet therapy, theater, mental health counseling (e.g., Alcoholics and Narcotics Anonymous), cognitive enrichment activities (e.g., bingo, bridge), spiritual counseling, movement therapy, and ADL duties for each of the individual men. Data will be presented on the efficacy and cost-effectiveness of this cutting edge model program to promote well-being and increased quality of life among older adult inmates.

SESSION 1775 (POSTER)

END OF LIFE

BARRIERS AND FACILITATORS OF IMPLEMENTING EVIDENCED-BASED PAIN PRACTICES AMONG HOSPICE NURSES

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The purpose of this paper is to report findings from focus groups with hospice personnel that illuminate barriers and facilitators for the implementation of evidenced-based practices for cancer pain assessment and management in older adults in hospices. Data were provided from an NCI-funded project, Cancer Pain in Elders: Promoting Evidence-Based Practices in Hospices that is evaluating the effect of a multifaceted translating research into practice intervention. Sixteen Midwestern community-based hospices stratified by size serve as the clinical sites in this randomized control trial. Following the intervention period, focus groups were conducted at each intervention hospice with key personnel involved in the implementation of the intervention, as well as other hospice nurses and involved members of the interdisciplinary team. The focus groups were facilitated by a nurse who was uninvolved in the research project and experienced in conducting focus groups. The focus group data were analyzed independently by three researchers to determine the factors that served as barriers and facilitators to the implementation process. Consensus on main themes was achieved. The results identify that the barriers to the implementation of pain practices were associated with two main factors, organizational and structural issues within the hospice and understanding of the protocols outlined in the grant. The facilitators of the implementation process were associated with four main factors, including the tools and resources provided to the hospices as part of the grant, support from a nurse expert who worked with each hospice, educational resources, and willingness of hospice personnel and leadership to implement the evidence-based pain practices. Findings have importance for future research and clinical focus on promoting practice changes. Funded by R01CA115363

RETAINING PRE-ILLNESS COPING STRATEGIES AS A TOOL FOR POSITIVE ILLNESS EXPERIENCE: A CASE STUDY

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Patients with terminal cancer engage in various forms of coping to deal with their illness experience (Heim, et al., 1993). Examining coping mechanisms that result in positive outcomes for patients need more attention. The current project is a case study of one 62-year-old Caucasian female cancer patient in Tampa, Florida, whose unique coping style helped her remain positive throughout her illness. Two semi-structured interviews were conducted, each approximately 60 minutes. This data is from a larger project on self-perception in older women with advanced cancer. Three interrelated coping strategies were identified which helped the patient remain positive throughout her illness. First, she engaged in turning negative circumstances into positive experiences. She said "...I wanted the Lord to let me help other people somehow, facing what I did." She often engaged in helping others reduce their anxiety while waiting for chemo treatment. Second, she viewed her cancer experience as a fight in which she could actively engage. She viewed herself as a fighter throughout her life and did not let the cancer change that aspect of her identity. Third, her spiritual relationship with God had always been an important aspect of her coping repertoire which remained stable during her illness. She says, "...If I have to go, He'll bring me home. And I hope he'll say to me, 'Good Fight.'" This case demonstrates that patients can find meaning in their coping strategies if they are able to maintain aspects of their identity and coping strategies that were previously important to them.

THE END OF MY LIFE FOR THE SENIOR CITIZEN AT MARGINAL HAMLET IN JAPAN

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The purpose: The object of this study, "SUGARI district" is an enclave in Owase City, (Location is Middle of Japan) and the marginal hamlet by the rate of aging 54.9% as an inconvenient traffic place. So, the access of the health welfare medical services is very difficult. This study aimed for the senior resident in this area to find out for better and necessary comprehensive health system. The method: The object was senior citizen 206 of 65 years or more of this district living, and the answer of 181 people was obtained. This survey contents are as follow; present health condition including ADL, family relationship, social support and the end of my life issues. The result: 80% or more is living alone or living of two people with the consort. As for children, 68% lived outside this area. 74 % of resident recognized health conditions "So-so". However, 68% have given some medical care. All residents are proud of natural environment, and wanted to live through life here. If they will be difficult to live by themselves, they wish that most was going to live in their own home or child's house. However, they realized that it could do nothing but enter nursing home actually. So, it was made not to think about my end of life issues as possible. Most of people satisfied the community bonds. But, the overall social support was low. Their keen demands are enhancement of the public transportation facility and the health service regularly

PROSPECTIVE END-OF-LIFE DECISION-MAKING IN YOUNGER AND OLDER ASIAN INDIAN HINDU ADULTS

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The process of end-of-life decision-making involves the choice of treatment preference and decision-maker. This study examined Asian Indian Hindus' decisions to determine age and cultural effects within the context of socioemotional selectivity theory. Younger (N=100) and older (N=100) Asian Indian Hindus completed a questionnaire on end-of-life scenarios, Western and Indian acculturation and Hindu end-of-life values. Twenty participants were interviewed. Results of sequential

logistic regression indicated that the hypotheses on age effects were not supported. However, there was support of cultural effects, which was substantiated in the qualitative interview data as well as supplemental analyses with a sample of younger (N=64) and older (N=59) non-Hispanic Whites. The discussion focuses on the implications of these differences, for health related decision-making.

PALLIATIVE CARE PATTERNS OF OLDEST OLD AND RESIDENTS WITH NEUROPSYCHIATRIC CONDITIONS IN LONGTERM CARE

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Objective: According to the Center to Advance Palliative Care, the seriously ill constitute only 5-10% of patients, but account for over half of the nation's total healthcare costs. Palliative care (PC) programs have better and more cost-effective outcomes than conventional care and provide more/better services. To date, however, little research has been done to determine whether PC improves care in LTC settings. We address PC in these settings using the National Nursing Home Survey (NNHS). **Method:** 1,174 nursing home facilities participated in the 2004 NNHS, producing a sample of 1,317,300 residents. Data include health status, psychiatric and medical diagnoses, medications, and services received. We examined residents who were receiving PC (N=34,724). Data were parsed by age group: 65-84 yrs and 85 yrs and up, and by depression or dementia diagnoses. Outcomes involved standard PC given in hospitals. **Results:** 62.7% of residents did not have access to PC in their facilities. Of those with such programs available, 2.6% of respondents were in PC; 60.6% were ages 85+ years. Only 8% in PC made emergency room visits during their PC stay, most of these were for residents ages 85+ years. On average, 3 PC services were offered (range=1-7), most commonly symptom and pain relief and family assistance. Fewer services were offered to PC residents with dementia whereas those with depression received similar to the average. **Discussion:** We discuss how both the oldest old and residents with neuropsychiatric diagnoses receive different care in LTC than either younger groups or those with no such diagnoses.

END-OF-LIFE COMMUNICATION AMONG KOREAN AMERICAN AND NON-HISPANIC WHITE OLDER ADULTS

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End-of-life communication is an important process. However, discussing end of life treatment options varies by culture. This study aims to explore ethnic difference in end-of-life communication among Korean American and non-Hispanic White Older adults and identify the factors influencing it. This study used a cross sectional research design. Two hundred seventeen Korean American (n = 112) and non-Hispanic White older adults (n = 105) living in Metropolitan area were interviewed. Measures included end of life communication, knowledge, health beliefs including perceived susceptibility, severity, benefits and barriers, and other socio-demographic variables. Overall, approximately one half of the participants (51.6%) had ever engaged in end-of-life communication, but the prevalence of the end-of-life communication was significantly different between two ethnic groups. As compared to 64.8% of NHWs, 39.3% of KAs engaged in end-of-life communication. Multivariate analysis showed that end-of-life communication was significantly accounted for by knowledge, experience of illness, perceived severity of illness, and perceived barriers, but not by ethnicity. Knowledge, perceived severity and experience of illness had positive effects whereas perceived barriers had negative effects on end-of-life communication. Although ethnicity did not significantly predict end-of-life communication, ethnic differences in end-of-life communication were evident. In addition, knowledge gaps between these ethnic groups were

also observed. Given that obstacles (e.g., structural barriers to health care access) and cultural differences exist, development of culturally appropriate resources and interventions stand to promote advance care planning among Korean American older adults.

WILLINGNESS TO USE HOSPICE AMONG KOREAN AMERICAN OLDER ADULTS

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Although hospice has been documented to provide quality care to dying patients and their families, few racial/ethnic minorities utilize hospice services. This is particularly evident among Asian Americans. The present study focuses on Korean Americans who are known to lack knowledge about end of life care planning and have negative attitudes toward end of life care (e.g., Murphy et al., 1996). Modifying Andersen's behavioral health model, predisposing variables, potential health needs, and enabling factors were considered as predictors of willingness to use hospice. A series of logistic analyses was conducted using data from 675 Korean American elders (Mean age =70.2, SD = 6.88) residing Florida. Results showed that those who were younger (OR=0.96, 95% CI: 0.93-0.98) and with an educational attainment greater than high school (OR=1.67, 95% CI: 1.13-2.48) were more willing to use hospice. As the number of chronic conditions (OR=1.23, 95% CI: 1.05-1.03) increased, so did the likelihood of endorsing willingness to hospice use. The subsequent models with enabling variables showed that those with health insurance coverage (OR=0.59, 95% CI: 0.37-0.94), greater levels of acculturation (OR=1.07, 95% CI: 1.03-1.10), and prior knowledge of hospice (OR=4.43, 95% CI: 2.85-6.90) had a greater likelihood of endorsing willingness to use hospice. Our findings demonstrate the important role of enabling factors in determining willingness to use hospice. Researchers and hospice care providers should consider outreach programs to those less acculturated and without knowledge of hospice. Further studies should evaluate if those who are willing to use hospice actually utilize hospice services.

COMMON SENSE MODEL AND THE LIKELIHOOD OF END-OF-LIFE PLANNING

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The aim of this study is to examine whether patients' illness representations are associated with the probability of EOL planning. Data were used from a recent survey of 305 chronically-ill, non-institutionalized adults in NJ, age 55+. Logistic regression revealed that those patients who perceived their illness had greater impact on their life (rated on a scale from 0-10) were 1.2 times more likely to engage in formal EOL planning (OR = 1.184 per unit change in perceived impact, 95% CI = (1.046, 1.340)[p=.008]). The significance remained robust even when controlling for co-morbid conditions, functional-status, familial relationships, and sociodemographic variables. These findings broaden what we know about EOL planning and suggest that by eliciting patient perceptions about illness impact, practitioners may be able to increase the likelihood of EOL planning. By incorporating the Common-Sense-Model and patient perceptions of their illnesses, practitioners can better meet the end-of-life planning needs of their patients.

EFFECTIVENESS OF COMMUNITY OUTREACH IN INCREASING AFRICAN AMERICAN HOSPICE USE

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Background. Since the 1979 establishment of the Hospice and Palliative CareCenter (HPCC) in the Piedmont region of N.C., numbers have grown. However, the diversity of patients served does not reflect the racial/ethnic makeup of the population. HPCC initiated a community outreach program aimed at increasing the number of clients, particularly African American clients, served. The purpose of this study is to examine the effectiveness of the outreach effort by analyzing changes in population served over time. **Methods.** HPCC census data from 1999 through 2008 were analyzed to ascertain overall growth by race/ethnicity for hospice homecare, hospice inpatient care, and comfort care. Pre/post survey data of participants attending outreach programs were collected and analyzed beginning in 2009 to elucidate changes found. **Results.** HPCC has grown from serving 346 inpatients/year and 516 hospice homecare patients in 1999 to 935 inpatient/year and 1,018 hospice homecare patients in 2008. The percent of African American patients served has remained relatively stable but higher (18%, 2005 and 2006) than state levels (15%, 2005 and 2006). With external grant funding in 2003, HPCC achieved 21% African American enrollment compared to 16% for the state. **Discussion.** These findings suggest that although the number of patients served has increased dramatically, the percent of African Americans served has remained relatively stable. African American enrollment increased appreciably with supplemental targeted funding. **Measurable objective.** The HPCC community outreach model is an effective tool for increasing enrollment in hospice. Increasing minority use of hospice services may require a targeted, culturally sensitive educational approach.

END-OF-LIFE CARE IN LONG TERM CARE SETTINGS IN HONG KONG: DEVELOPMENT AND EVALUATION

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Long term care setting has become a common site of death around the world. In Hong Kong, most of the long term care residents who are terminally ill, spend their last days in hospitals. With the aging population and growing respect for individual choices, it is anticipated that more residents will choose long term care settings as their place of end-of-life care and even place of death. The TWGHs Jockey Club Rehabilitation Complex, consists of long term care settings for older adults, started to develop the end of care in late 2006. A three-stage model is adopted. In the first stage, ten focus groups were carried out to examine the existing structure, resources, and room for development. In the second phase, the NEST assessment tool for screening the needs of the older adults was tested, and consequently a process for care was proposed. In the final stage, a multi-source and longitudinal evaluation was done with the users, family members, staff and visiting doctors. Four measures over a year were collected. Positive changes are found in quality of life. As observed by the visiting doctors, long term care residents were found to have significant changes in emotions ($t = -2.40$, $p < .05$) and overall health ($t = -4.19$, $p < .01$).

MEDICAL AND SOCIAL FACTORS AFFECTING HOME DEATH RATES BY PREFECTURE IN JAPAN

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Objective: In Japan the place where people die has largely changed from home to hospitals. In 2006, overall 82.3% of deaths occurred in the hospitals, with only 12.2% occurring at home. However, many elderly people say that they wish to "die at home". Therefore, there is a great discrepancy between the preference and the reality. Previous studies

have reported that several factors were affecting home death rates in Japan. However, because of a lot of variables had been using in analysis, the problem of multicollinearity has not been solved. Therefore, the aim of this study is to examine the factors affected to the home death rate in Japan using a new method for the selection of variables. **Method:** The data analyzed in this study is from statistical documents published by the Ministry of Health, Labour and Welfare, the Ministry of Internal Affairs and Communications, and the Cabinet Office. All of this data can be obtained on the Internet. **Results:** In this study, the principal component analysis was adopted to select variables in initial analysis. Results of the multiple regression analysis examined significant effects of the numbers of days in hospital, the number of users of home services for the prevention of long-term care, and the number of users of home help services on the home death rate by prefecture in Japan. **Discussion:** The method employed in this study uses a clearer variable selection process than in previous studies. Therefore, this method seems to be an effective method for selecting indicators related to medical and social indicators which have many conceptual overlaps.

FAMILY THEMES IN RESPONSE TO THE DEATH OF AN ELDERLY FATHER

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How do multiple family members respond to and make meaning of the death of an elderly father? What themes emerge from separate qualitative interviews with the local adult children and the widow 6 to 10 months after the death? What have we learned when they talk about their personal experiences and feelings and their perceptions of experiences and feelings of the other? An exploratory study includes 5 families that were located through newspaper obituaries. The deceased fathers ranged in age from 73 to 88; included Catholics, Protestants, and Jews; 1 African American family, 4 Caucasian; occupations ranged from shipping clerk to professor. Two interviews were audio taped and transcribed with each of 13 surviving family members: 5 widows, 8 adult children. Qualitative analyses yielded four interrelated themes: (1) A sense of separateness that each person experiences in his or her bereavement and the tendency to avoid disclosure and emotional sharing; (2) the reciprocal wish to protect the other from one's personal burden of loss; (3) adult children and their widowed mother tend to see the widow "in a new light", emphasizing independence and strength; and (4) mutual concerns about the widow's future decline and dependency. The implications of these findings are discussed as they relate to support provided to bereaved individuals and families.

'TIL DEATH DO US PART: SOCIODEMOGRAPHIC, HEALTH AND FUNCTION CORRELATES OF TIME SINCE SPOUSAL LOSS

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Purpose: To explore characteristics associated with time since widowhood among African American (AA) and White (W) community-dwelling older adults of the UAB Study of Aging. **Methods:** Data were from an in-home assessment in 2004 (N=624) where 41.6% of participants were widowed (N=260). Time since spousal loss ranged from <1 year to 60-years (M=15.5). Time since spousal loss was categorized in quartiles: ≤5-years (N=64); 6-10 years (N= 67); 11-22 years (N=62); >22 years (N=67). CHI-Square, ANOVA, and LSD were used to examine sociodemographic and health/function variations. **Results:** Compared to other race/gender categories, AA females were more often widowed ($P = < .001$), with higher widowhood duration ($p = < .001$). Mean years since loss were: 20.6 for AA women; 13.39 for W women; for 11.0 for AA men; and 5.72 for W men. Compared to other race/gender categories, AA widows had lower incomes ($p = < .001$) and were more likely to live with others ($p < .001$); had lower physical performance scores ($p = .010$) and more limited life-space mobility ($p = .014$). Age, rural residence, transportation difficulty, social support, self-reported health, cog-

nitive status, comorbidity count, depression, and anxiety did not vary. Conclusion: Widowed older adults are a heterogeneous population, with significant variations in length of time widowed, race, gender, living arrangements, as well as measures of physical function and mobility. Among AA females, time widowed was longer and associated with a unique composite of sociodemographic and functional correlates. Qualitative research is needed to contextualize the impact of spousal loss among community-dwelling older minorities.

INFORMAL CAREGIVERS OF HOSPICE PATIENTS WITH CANCER: A PROSPECTIVE BEREAVEMENT STUDY

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This prospective study explored social and psychological needs of caregivers of advanced cancer patients and their subsequent bereavement adjustment. Participants were recruited by staff referral from a large Gulf Coast-based hospice organization. The sample included informal caregivers who had provided assistance to a hospice patient with a primary cancer diagnosis. Those individuals who lived furthest from the dying care recipient, the long distance caregivers, were of particular interest. The study consisted of a repeated measures administration of self-report surveys, which collected respondent data within the first week of hospice enrollment and, again, 3 months into bereavement. A total of 106 caregivers participated in the pre-death survey (50% response rate) and 70 in the post-death survey. Findings indicate that caregivers who assumed a greater share of the care responsibilities reported higher levels of depressive symptoms during bereavement. Quality of dying was found to be positively correlated with length of stay in hospice ($r = .53, p < .01$) and negatively related to emotional grief ($r = -.55, p < .01$). A large majority of respondents were satisfied with hospice care. However, long distance caregivers were less satisfied with the availability of hospice ($p = .004$) and hospice care in general ($p = .042$). The generalizability of these data is limited by the use of non-probability sampling, nested groups, and small sample size. Implications for caregiver support, hospice care, and future research will be discussed.

COPING IN THE EARLY STAGES OF WIDOWHOOD: THE ROLE OF DEATH PHILOSOPHY, RELIGION, AND PHYSICAL HEALTH

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The death of a spouse is a severe loss and can shatter a person's view of the world. However, restructuring its meaning via one's death philosophy can buffer the psychological impact of this loss. Research suggests that high levels of fatalism (the belief that events are largely beyond one's control) are associated with negative outcomes, whereas acceptance of death has been linked with resiliency. However, one important, unanswered question is how these opposing philosophies simultaneously influence one's ability to cope with the loss of a spouse. This study compared the influence of these contrasting perspectives on psychological adjustment 6 months following the death of a spouse. Religion and physical health, factors also known to influence bereavement trajectories, were included as potential moderators. Analyses were based on prospective, longitudinal data from the Changing Lives of Older Couples study ($N = 244$ widow(er)s). Regression analyses (controlling for various socio-demographic and baseline psychological adjustment variables) revealed that greater acceptance of death, religiosity and health satisfaction were significantly associated with fewer depressive symptoms and with less grief at the 6-month follow up, and that pre- and post-loss depression were positively correlated. Fatalism, however, was not significantly associated with psychological well-being at the 6-month follow-up. Health satisfaction and religiosity did not moderate any of the relationships between predictors and criterion variables. Although these results demonstrate conceptual divergence, they do not show fatalistic or accepting views of death as categorically opposed philosophies toward death and dying.

PARENTAL BEREAVEMENT IN TWO COHORTS OF THE ISRAELI OLD-OLD POPULATION

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Little is known about the associations between parental bereavement and physical and mental health in old age. We investigated the types of parental bereavement and whether the death of a child led to decreased wellbeing and increased mortality in older parents. The data used are from two national studies on the health, mental, and social status of two cohorts of older persons living in Israel. Data analysis indicated that bereaved parents tended to be somewhat older, and were more likely to be female, unmarried, less educated, and born in the Middle East or North Africa than non-bereaved parents. In addition, bereaved parents were, as a whole, more depressed and more functionally limited than non-bereaved parents, even after controlling for age and gender. The observed crude association between bereavement and mortality was entirely accounted for after adjusting for age and gender. This analysis provides an initial examination of the types of bereavement in older Israeli parents and the concomitant mental health and functioning. Whereas parental bereavement due to war is most frequently discussed in the Israeli context, parental bereavement due to disease is the most prevalent in this age group, and is more common in persons from lower socio-economic status.

GRIEF AMONG DEMENTIA CAREGIVERS: A COMPARISON OF TWO MEASURES

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Research suggests that grief can be a component of dementia caregiving, even before the care recipient dies. The purpose of the current study was to identify areas of overlap and disjunction in two self-report measures of grief, one adapted from the postdeath literature, and one designed specifically for use with dementia caregivers. The first measure, the Prolonged Grief Disorder Inventory (PG-12; Prigerson, Vanderwerker, & Maciejewski, 2008) has been applied extensively to post-death populations, but is only beginning to be applied to predeath grief. The second measure, the Marwit-Meuser Caregiver Grief Inventory-Short Form (MM-CGI-SF; 2005) was developed based on focus groups with dementia caregivers. These measures appear to differ both in item content and in their definitions of pathological grief, but these differences have not been tested empirically. A total of 110 spousal and adult child caregivers of people with dementia completed these measures. Each measure had acceptable levels of internal consistency in this sample ($\alpha s > .80$). In terms of areas of overlap, total score on the PG-12 was highly correlated with total and subscale scores on the MM-CGI-SF ($r = .51$ to $.68$). These findings provide evidence for the convergent validity of each measure. However, the number of caregivers identified as in need of intervention based on the PG-12 and the MM-CGI-SF criteria were 4% and 18%, respectively. This discrepancy suggests the need for future research regarding the best way to define pathological grief, and which grief symptoms and measures are most predictive of long-term dysfunction.

NEW FACTOR STRUCTURE FOR THE REASONS FOR LIVING INVENTORY AMONG OLDER AFRICAN AMERICAN ADULTS

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Older adults aged 65 and older in general have high suicide completion rates but older African Americans have relatively lower rates than their European-American counterparts suggesting that their protective factors are unique. The Reasons for Living Inventory (RFL) is a 48 item self-report measure that assesses potential reasons for not com-

pleting suicide should the thought arise. The authors of the RFL have proposed the scale to contain six subscales: Survival and Coping Beliefs, Responsibility to Family, Moral Objections, Fear of Suicide, Fear of Social Disapproval, and Child-related Concerns (Linehan, Goodstein, Nielsen, & Chiles, 1983). The RFL has a solid theoretical base, is widely used in clinical research, and has ample evidence of reliability and validity among European-American adults (Osman et al., 1993; Range, 2005; Range & Knott, 1997). The purpose of the present study was to explore the factor structure of the RFL with older African American adults to determine its validity with this particular population. Community-dwelling older African American (N = 72; M age = 69.9 years; age range = 60 to 86 years; 57.5 % Female; M years of education = 13.3) anonymously completed the RFL. Principal components analysis with promax rotation revealed that the factor structure of the RFL with older African American adults is different than the theoretically derived factor structure proposed by the authors. Items similarly loaded onto six factors, though not as initially proposed. Correlations between these newly derived factors ranged from 0.3 to 0.7. Future research is needed to validate these preliminary findings.

THE IMPACT OF WIDOWHOOD ON PARENT-CHILD RELATIONSHIP AND ITS IMPLICATIONS FOR WELL-BEING AMONG KOREAN ELDERS

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While ambivalence theory suggests that intergenerational ambivalence tends to increase during life transitions, previous research in the US has not supported this hypothesis in the case of older adults' transition to widowhood. Using data of Korean elders, this paper examines: (1) the effect of widowhood on older adults' positive and negative assessment of their relationship with children and (2) its implications for older adults' psychological well-being in East Asian culture. Analyses are based on data from the Survey on the Quality of Life of the Elderly, a stratified multi-stage probability sample of older adults living in the cities of Seoul and Chuncheon in Korea. The first wave of data collection occurred in 2003 followed by additional surveys in 2004, 2005, and 2007. The current study uses data from 2004 survey which contains the measures of older adults' positive and negative feelings toward children. Analytic sample consists of 360 widowed and 384 married individuals who are aged 60 and over. Compared to married older adults, widowed older adults showed higher levels of negative and lower levels of positive feelings toward their children. Lower positive and higher negative feelings toward children were associated with higher levels of depression and lower morale among widowed persons. Findings suggest that widowhood may bring strain in intergenerational relationships in Korea more so than in the US. Working with bereaved older adults and their children to reduce negative interactions and forge constructive relationships may enhance older adults' well-being in this cultural milieu.

SESSION 1780 (POSTER)

GENDER AND PERSONALITY

AT MY AGE? DO I REALLY NEED TO?

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Background: Latino/Hispanic women have the highest rate of cervical cancer in the U.S. (16.2 per 1000) while having the lowest rate of Pap screening. Texas has one of the highest cervical cancer death rates in the US. The mortality rate for cervical cancer in Hispanic women is 13.2 per 100,000 as compared to 8.2 per 100,000 for white women and 8.4 per 100,000 for all races. Cervical cancer screening is the lowest among older Hispanic women. Older Mexican American women are the least likely (less than 60%) to be compliant with cervical cancer screening. Cultural beliefs and health literacy are believed to play a role in the

decision making process of these older woman who choose not to be screened. Aim: To develop a culturally informed theory of behavior to understand factors that influence and older Latino/Hispanic woman's decision to undergo recommended routine gynecological exam. Methods: A semi-structured interview was conducted with questions aimed at exploring the process that older Latino/Hispanic women undergo to decide whether to attend cervical cancer screening. Results: There are varied and complex reasons not to attend routine gynecological exam, including lack of information and/or knowledge as well as family history. Conclusion: Additional information is presented to further understand the decision making process of an older Mexican-American woman to undergo or forgo annual gynecological exam. Further research is needed to address misinformation and provide adequate education to older Mexican-American women

WOMEN NARRATE LATER-LIFE REMARRIAGE: NEGOTIATING THE CULTURAL TO CREATE THE PERSONAL

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While research has provided information about remarriage for women in later life, much of our knowledge concerns factors that contribute to remarriage or the desire to remarry. This study adds to the literature by focusing on the process of remarriage for women in later life. The purpose of this qualitative study was to enhance our understanding of how older women view and experience remarriage. In this study, a narrative approach affords both a holistic vantage point on later-life relationships and at the same time a "view from the inside" – older women's own accounts of single life, relationship development, and remarriage. The narratives were obtained in semi-structured, in-depth interviews with eight recently remarried women between the ages of sixty-five and eighty. A two-stage analysis addresses, first, the narrative content—the phenomenology of remarriage for these older women. Topics include: (a) the desire (or not) to remarry, (b) the experience of dating, (c) the decision to remarry, (d) marriage as a different experience than it was previously, and (e) the negotiation of interdependence in this new relationship and its meaning for identity. The second stage focuses on process, analyzing how cultural-level narratives are drawn upon in the creation of the women's personal stories. Based upon these analyses, we discuss the ways that a narrative approach can inform our understanding of later-life relationships, and we comment on the potential of narratives such as these to rewrite a script for older women's relationships.

BODY IMAGE AND OLDER WOMEN: NOT INVISIBLE ANY MORE

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Though there has been research asserting that older people are affected by changes in body appearance and function, few studies appear to have examined body image (BI) and aging. In an effort to direct future research efforts by clearly delineating the need for defined focus and expanded research regarding BI in older women, this poster reports results of a review of existing published research on BI and older women. Research questions included: What proportion of published studies in academic journals addressed BI in older women? What tools are available for collecting valid, reliable data? What are key variables of interest? What are key findings of current research into BI in older women? What future research is recommended? Results include: review of one key database, January 2007-present, revealed 343 citations for BI and women, yet only 12 referred specifically to older women; of the many instruments found to assess aspects of BI, only three were designed and tested for older adults; generally agreed-upon finding include that older women may reject current cultural ideals, but BI disturbance persists into old age even though greater tolerance for larger body size may exist as compared to younger women, dieting practices persist

into old age, and older men are less concerned with BI aesthetics than older women. It is hoped that this presentation will raise awareness of the current dearth of research regarding BI in older women, increase interest in the topic, and generate productive discourse regarding specific future research questions, projects, and collaborations.

THE ROLE OF SOCIAL SUPPORT IN BEHAVIORAL OUTCOMES AMONG OLDER WOMEN

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Although research has documented that social support is a positive pathway to health-promoting behavioral practices, very few longitudinal studies assess the relationship between social support and health-promoting behaviors among older, diverse women. Three waves of data from the Americans' Changing Lives (ACL) survey assess whether changes in perceived social support influence behavioral outcomes among 671 African American and non-Hispanic white women aged 60 years and older. Body mass index (BMI), physical activity, alcohol consumption, and cigarette smoking were examined as dependent variables. Independent variables were demographic characteristics, and social support variables. Research indicates that age, ethnicity, and education were strong predictors for BMI; demographic characteristics and number of chronic conditions for physical activity; age, ethnicity, education, and income for alcohol consumption; and age and marital status for cigarette smoking. Positive social support from friends were the most successful in explaining physical activity while positive social support from friends, spouse and children were not significant for BMI, alcohol consumption, or cigarette smoking. The results imply is that social support from friends may be an important predictive factor in engaging older women in physical activity. By understanding how social support interactions affect the health of older women, public health interventions can be designed to optimize physical activity as women age.

AGE, SOCIAL SUPPORT, AND CHILDHOOD TRAUMA AS PREDICTORS OF SUBSTANCE USE IN RECENTLY INCARCERATED WOMEN

T.L. Young, A. Pearman, *Gerontology, Georgia State University, Atlanta, Georgia*

In 1990, adults aged 50 and older accounted for 4% of the incarcerated population. By 2001, the percentage of incarcerated adults aged 50+ had increased to 8% (Corrections Yearbook, 2001). While the majority of these prisoners are white males, research suggests that the older female population is also increasing (Kratcoski & Babb, 1990). The majority of the research examining older adult incarcerations has explored either male incarceration exclusively or has focused on macro forces, such as sentencing mandates and stricter consequences for petty crimes. Therefore, the goal of this research is to examine micro forces, such as social support, substance use, and childhood traumas and their roles in the lives of older incarcerated women. The sample of 189 recently incarcerated women aged 18-58 is derived from a larger research study entitled the Women's Life Experience Project. Participants were asked questions in regards to their perceptions of social support using the Interpersonal Support Evaluation List (Cohen, 1985), experiences of childhood sexual trauma using the Sexual Abuse Exposure Questionnaire (Ryan, Rodriguez, Rowen, & Foy 1992), experiences of childhood physical trauma using six survey questions, and experiences of substance use collected by correctional officials. Multiple regression analyses revealed that older age and less social support predicted more alcohol use, and older age alone predicted more drug use. These results illustrate a need for deeper exploration of these micro forces across the life course of incarcerated women and the need for age-specific programs with at-risk populations to address substance use.

THE INFLUENCE OF PERSONALITY ON CAREER CHOICES

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This study explores the relationship between the NEO-PI and vocational choice as determined by Holland's typology on a sample of 486 older adults (M age = 72). Costa, McCrae, & Holland (1984) conducted a similar study on a sample of 361 adults, 21 to 89 years old using the Self-Directed Search scales. The data revealed that the personality trait of Openness to Experience was strongly associated with Investigative and Artistic interests, Extroversion with Social and Enterprising interests, and less Openness with Conventional interests. To explore further the influence of personality traits on career choices, we utilized the revised NEO-PI (Costa & McCrae, 1992), which added the personality traits of Agreeableness and Conscientiousness, and we assessed vocational interests by ranking the participants stated job according to the Holland Typology scales. We found, as anticipated, comparable results to Costa et al.'s study while controlling for gender on the personality traits of E and O. For example, we found that a high score on Openness was strongly related to career choice in the Investigative, Social, and Artistic fields while a high score on Extraversion was associated with Enterprising careers. In addition, we found that high Conscientiousness was associated with Artistic endeavors and high Agreeableness with Social interests. Moreover, scoring high on Neuroticism went with choosing Conventional and Realistic lines of work. Finally, Realistic jobs were associated with less Openness, Extroversion, Conscientiousness, and Agreeableness. Implications for post-retirement vocational choices and the strong influence that personality plays in career experiences are discussed.

PERSONALITY, HOUSING SATISFACTION, AND PSYCHOLOGICAL WELL-BEING AMONG OLDER ADULTS LIVING IN CCRC

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This research examined the relationship between personality, housing satisfaction, and psychological well-being of thirty-seven older adults, who moved into a newly constructed Continuous Care Retirement Community (CCRC). The participants were interviewed twice; during the first interview, the participants were asked to respond to questions on research instruments as if it was one week before the move. The second interview examined the same measures except for personality questionnaire. Two research questions were explored. The first asked which personality traits (neuroticism, extroversion, conscientiousness, agreeableness, and openness) were more prevalent among older adults. The second question asked which personality traits were significantly related to housing satisfaction and psychological well-being. Results for the first question indicated that participants scored the lowest on Neuroticism and highest on Agreeableness and Conscientiousness. To explore the second question, the relationship between personality, housing satisfaction, and psychological well-being was examined separately for the data collected during the retrospective and second interviews. For Neuroticism, the results revealed a significant positive relationship with depression and significant negative relationship with morale and life satisfaction. For Extroversion, Agreeableness, and Conscientiousness, the results revealed significant positive relationship with morale and life satisfaction and significant negative relationship with depression. Openness to Experience was not significantly related to any of the outcome variables, and not one personality factor was significantly related to housing satisfaction. These results suggest that the participants scored relatively low on Neuroticism and relatively high on Agreeableness and Conscientiousness. Personality did not significantly affect

housing satisfaction, but personality was significantly related to psychological well-being.

SOCIAL RELATION GOALS AND TELEONOMIC RELEVANCE

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The extent to which current goals relate to future goals is called teleonomic relevance. The closer goals are hierarchically linked will theoretically result in psychological well-being and increased motivation to achieve goals. The importance of social relationships becomes a particularly salient goal domain in later life. We explored the inter-relatedness between current social relation (SR) goals and future SR goals. We conducted face-to-face interviews with 85 (57 women, 28 men) community-dwelling older adults (mean age = 74) recruited from two small primary care clinics. We administered a measure of current (personal projects) and future (possible selves) goals, the Geriatric Depression Scale, Life Orientation Test, Health Perceptions Questionnaire, and a measure of teleonomic relevance. Close to half of the participants spontaneously identified at least one SR possible self ($n = 52$) as well as at least one SR personal project ($n = 36$). Although there was no significant relationship between actual generation of current SR personal projects and future SR possible selves, participants who identified SR projects still perceived more teleonomic relevance between their current and future goals [$t(73) = -2.3, p = .03$] compared to individuals who did not generate current SR projects. Although mental and physical health status were unrelated to teleonomic relevance scores, optimism significantly predicted teleonomic relevance ($F = 1, 76 = 5.0, p = .03$). These findings perhaps indicate that social engagement and optimism may facilitate motivation for all future goals, regardless of specific goal domain

PERSONALITY AND VOLUNTEER ACTIVITY AMONG JAPANESE COMMUNITY-DWELLING OLDER ADULTS

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[Introduction] Volunteer activity is beneficial for maintaining autonomy and quality of life in old age. Many studies have reported various factors associated with volunteer activity among older adults. However, few studies have examined the relationship between personality traits and volunteer activity among older adults. We therefore examined this relationship in a sample of Japanese community-dwelling older adults, using a cross-sectional study design. [Method and materials] The study sample included 1279 individuals (506 men and 773 women) aged 65 years and older. The NEO five-factor inventory was administered to assess the "big five" personality traits: neuroticism, extraversion, openness, agreeableness, and conscientiousness. Multivariate logistic regressions adjusted for gender, age, number of years of education, presence of chronic diseases, presence of psychiatric problems, history of hospitalization during a one-year period, living alone, functional capacity (measured using the Tokyo Metropolitan Institute of Gerontology Index of Competence), and mental health state (measured using the General Health Questionnaire), were performed for each personality trait to test the association between personality and participation in volunteer activity. [Results] The rate of participation in volunteer activity among the elderly was 14.6%. Use of logistic regressions showed that extraversion (1-standard-deviation increment; odds ratio [OR] = 1.34, 95% confidence interval (95%CI) = 1.11-1.62), agreeableness (OR = 1.25, 95%CI = 1.06-1.48) and conscientiousness (OR = 1.37, 95%CI = 1.15-1.64) were associated with participation in volunteer activity. [Conclusion] Our results indicate that high extraversion, high agreeableness, and high conscientiousness are predictive of participation in volunteer activity among community-dwelling older adults. Our findings may help to

encourage older adults to initiate volunteer activity that would contribute to maintaining autonomy and quality of life in old age.

SEX AND PERSONALITY PREDICTORS OF MEMORY SELF-EFFICACY IN YOUNGER & OLDER ADULTS

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Memory self-efficacy (MSE) is defined as beliefs about one's ability to remember. Previous studies have looked at MSE with a broad range of variables, such as sex, personality, and age, but few studies have combined these variables to explore differential predictors of MSE. Data was collected on 95 young adults (ages 19-28) and 283 older adults (ages 45-89). Participants with gross cognitive dysfunction were excluded from the study. The Capacity, Change, Anxiety, and Locus of Control subscales of the Metamemory in Adulthood questionnaire (Dixon, Hultsch, and Hertzog, 1998) were used as the measure of memory self-efficacy. The NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) was used to measure the five personality domains, including Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. As expected, we found age to be negatively correlated with MSE scores. There was not a main effect of sex on MSE scores. We found that four of the five personality domains were related to MSE. Specifically, significantly higher MSE scores, while low scores on Neuroticism were related to higher MSE scores. We also found two interactions, namely Age X Extraversion and Sex X Agreeableness. Older adults low in Extraversion had significantly lower MSE scores than older adults high in Extraversion, whereas extraversion was not important for young adults' MSE scores. Females high in Agreeableness had significantly higher MSE scores than those low in Agreeableness, whereas the Agreeableness effect for males was negligible. These results will be presented and further explained.

THE BIG FIVE PERSONALITY TRAITS AND RATINGS OF HEALTH AS PREDICTORS OF MORTALITY

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There is a burgeoning literature on the Big Five personality traits as predictors of mortality. Specifically, low levels of conscientiousness and high levels of neuroticism are deleterious to an individual's health. Findings for other traits are somewhat mixed. Moreover, understanding the influence of other factors (such as health) with this relationship is also growing. The current investigation utilizes data from the Boston VA Normative Aging Study. In 1990-91, 1,349 male participants (mean age = 64.9; range = 45-89) completed the Goldberg Unipolar markers of the Big Five personality traits and were followed until July 2006 (mean survival time = 11.01 years), during which 547 deaths occurred. We used proportional hazards modeling to examine mortality risk over the 18-year follow-up period. There were significant main effects for each trait except for neuroticism. High levels of conscientiousness, extraversion, agreeableness, and openness significantly decreased mortality risk. After adding controls (age, objective and self-rated health, and depression), the personality effects were attenuated. A 1 SD increase in age was associated with 85% increase in mortality risk (HR = 1.11; CI = 1.09-1.12). A 1 SD increase in subjective health (better health) was associated with 15.4% decrease in mortality risk (HR = 0.77; CI = .68-.90). A 1 SD increase in objective-rated health was associated with 13.4% increase in mortality risk (HR = 1.01; CI = 1.00-1.01). Both subjective reports of one's health and objective-rated health explain the personality-mortality association. The interplay between personality and health likely has cumulative effects over time that influences mortality risk.

EFFECT OF CHOICE SIZE AND PERSONALITY STYLES ON PERFORMANCE OF DECISION MAKING AND OPINION ON THE CHOICE SIZE ADEQUACY IN MEDICARE PART D

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The Medicare prescription drug plan requires older adults to consider many options. Thus choosing the best plan may be difficult especially for older adults (Tanius, Wood, Hanoch, & Rice, 2009). In this study we investigated the effect of choice size and age on performance of a decision making task, their opinion on the adequacy of choice size, and the influence on personality factors, such as maximizing and satisfying. We had 223 participants, 120 young adults and 103 old adults. We found that age and choice size have significant effects on decision making, for choice size ($B=0.40$, $t=4.45$, $p<.01$) for age ($B=0.428$, $t=3.41$, $p<.01$). Interestingly, only choice size but not age has a significant effect on participants' opinion on the choice size adequacy, ($B=.066$, $t=6.56$, $p<.01$) such that choice of 3 plans are judged as not enough and choice of 20 plans are judged as more than required. It was found that there is no significant effect of differences in maximizing styles on performance on decision making. There is a significant interaction effect of maximizing styles and choice size on participants' opinion on the choice size adequacy, ($B=.024$, $t=2.13$, $p=0.34$) such that individuals who tend to maximize find choice size of 20 as either adequate or less than adequate but individuals who satisfy find choice size of 20, too much and more than adequate. This implies that personality factors have a significant effect on opinion about number of choice but has no significant effect on performance of decision making.

RELATIONSHIPS BETWEEN BIG FIVE PERSONALITY TRAITS AND MARITAL SATISFACTION IN LONG-TERM MARRIAGES

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Research has indicated that Big Five personality traits are related to marital happiness or discord (Bouchard et al., 1999; Donnellan et al., 2004; Watson et al., 2000) but few studies have examined late life marriages. Whisman et al. (2006) found that greater marital discord was associated with lower agreeableness and higher neuroticism for older couples, but marital discord was not assessed by a standardized measure. This study examined associations between Big Five personality traits and marital satisfaction among older adults in long-term marriages. Older couples ($N=32$; $M = 49.2$ years of marriage) completed the Revised NEO Personality Inventory and the Marital Satisfaction Scale. There was no significant mean difference in overall marital satisfaction between the husbands ($M = 8.1$, $SD = 15.0$) and wives ($M = 9.0$, $SD = 16.8$) ($p > .25$). There was a weak positive, non-significant correlation between their marital satisfaction scores, $r(30) = .14$, $p > .25$. From the perspective of the husbands, a linear multiple regression with marital satisfaction as the DV and their self-reported Big Five personality dimensions as the IVs revealed no significant relationships. The husbands' marital satisfaction was also compared to their wives' Big Five scores. Multiple regression revealed a significant relationship (adjusted R squared = .32, $p = .020$). Standardized beta coefficients revealed that Openness was a significant negative predictor. From the perspective of the wives, regression revealed no significant relationship between their marital satisfaction and their personality traits. The wives' marital satisfaction was also compared to their husbands' Big Five scores. Multiple regression revealed there was no significant relationship but standardized beta coefficients revealed that Agreeableness was a significant negative predictor. This study suggests that marital satisfaction in older men is related to lower levels of openness in their wives whereas marital satisfaction in older women is related to lower levels

of agreeableness in their husbands. The finding may reflect traditional gender role expectations and life stage.

CONSCIENTIOUSNESS AND NEUROTICISM AS PREDICTORS OF DISCREET PHYSICAL HEALTH OUTCOMES

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Links between personality and both physical health outcomes and mortality have been demonstrated in many samples. These effects typically involve relating a broad measure of personality to a broad measure of physical health, or a broad measure of personality to one specific health outcome or process. Conscientiousness and neuroticism consistently emerge as the best predictors of physical health, where conscientiousness is positively related to health outcomes and neuroticism is usually negatively related to health outcomes. Prediction of specific health outcomes is an important step in better understanding the relationship between personality and broad outcomes such as overall physical health and mortality. These broad relationships may result from personality traits operating simultaneously through many different discreet health outcomes. The present study uses data from the Health and Retirement Study (HRS) to investigate the relationships between Big Five conscientiousness and neuroticism and self-reported diagnoses of specific physical health outcomes including hypertension, heart disease, diabetes, lung disease, arthritis, and stroke. Since the HRS data consists of married couples, we employ a multilevel model to account for dependency between dyad members. With the exception of diabetes, both conscientiousness and neuroticism operate as parallel predictors, although their relationships to specific health outcomes vary in magnitude. In the case of diabetes, conscientiousness is a significant predictor while neuroticism is not. Implications for future research linking personality and physical health are discussed.

GENDER DIFFERENCES IN THE ASSOCIATIONS BETWEEN ADL AND OTHER HEALTH INDICATORS IN 1992 AND 2002

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Different components of disability and health follow different trends over time. Also, several health indicators develop differently for men and women. Have the relationships between ADL and other health indicators changed over time? And are there gender differences in these changes? We examined gender differences in the associations between ADL and objective tests (physical performance and lung function) as well as self-reported measures (global health, mobility, pain, and psychological problems) in 1992 and 2002. Data were from the Swedish Panel Study of Living Conditions among the Oldest Old (SWEOLD), a nationally representative interview survey of persons aged 77+. Women had significantly higher prevalence rates for most problems both survey years. Prevalence rates increased significantly between 1992 and 2002 for all indicators except ADL and IADL. Virtually all measures, both objective tests and self-reports, were significantly correlated with ADL and IADL. The associations between activity limitation and different health problems were stronger for men than for women. The overall pattern over time was that the correlations become weaker for women and stronger for men in 2002 compared to 1992. Changes in the associations between activity limitations, physical capacity, and health problems imply that different indicators follow different trends. ADL and IADL appear to reflect different dimensions of health and different kinds of needs for men and women. Changes in the environment and in gender roles may contribute to change over time and these changes seem to affect men and women differently.

GENDER AND RELIGIOUS DIFFERENCES ASSOCIATED WITH VOLUNTEERING IN LATER LIFE

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The purpose of this study is to use a nationally representative sample of older adults in the United States to investigate the effect gender and religiosity has on volunteer behavior in later life. This study looks specifically at the gender and religious differences associated with volunteering in later life. Accounting for gender and religious differences, more specifically, this study examines the assumption that older women are more likely to volunteer in later life as opposed to men, and that gender is a better predictor than being religious for the likelihood of occupying a volunteer role in later life. This study poses questions about the differences in gender and religiosity associated with volunteering in later life; the results indicate there is more work to be done as we conduct research that is clearer about how volunteerism and religiosity are measured in relation to gender, and the overall impact these differences have for older women and their respective communities.

PROFILE OF OLDER MEN WITHIN THE GREATER PITTSBURGH RANDOMIZED HOUSEHOLD HEALTH SURVEY

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Due to the high mortality of Black men, it is pertinent that we increase knowledge about racial differences in the aging process. Our study provides an overview of the similarities and differences between older Black and White men in Allegheny County on demographics, medical mistrust, social support, discrimination, health, and psychological well-being. We use a weighted subsample of Black and White men aged 50 years and older ($M=64.90$, $SD=10.53$) from the Greater Pittsburgh Randomized Household Health Survey ($N=244$; 22% African American). Within demographics, White men reported higher levels of education ($p=.010$) and income ($p=.000$) and being married ($p=.004$). In the same vein, more Whites owned their own homes ($p=.000$). Within health, both races reported similar levels of physical activity, tobacco usage, depressive symptoms, and self-esteem. Whites reported more social support ($p=.040$) and receiving care from a doctor's office ($p=.000$). Within medical mistrust, both races were equally willing to participate in future medical research, and both felt that their doctor would explain a research study fully. However, Black men reported more experienced discrimination across all settings ($p=.000$), and had heard more about the Tuskegee Syphilis Study ($p=.000$). Also, both races reported similar levels of perceived quality of health care. While this study is a preliminary investigation, it provides needed background for understanding racial similarities and differences among older men, especially within medical mistrust. Many of the racial differences found confirm findings reported previously, however, the similarities between these two groups are worthy of note and have implications for future research.

CHEMICAL ADDICTIONS IN OLDER ADULTS: THE RELATIONSHIP OF GENDER TO TREATMENT, RELAPSE AND RECOVERY

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While older adults are one of the fastest growing populations in the chemical addictions community the literature and treatment programs overwhelming focus on adolescents and younger/mid-life adults. Additionally, there are even fewer sources that examine gender and aging as variables for treatment, recovery and potential relapse. The present study utilized a holistic approach to explore differences in the experiences and outcomes of older women and men who underwent treatment for chemical addictions in a program specifically for older adults. A total of 285 people participated in the study between April 2004 and June 2008. Of the 285 participants, women comprised 40% (114) and men 60% (171). Men were more likely to have experienced previous treatment

(72%) while women were more likely (83%) to have co-occurring disorders (depression and other mental health issues). Although co-occurrence was also a significant factor for men (68%). Participants were initially interviewed two weeks into the treatment program and then re-interviewed by telephone at 6 month intervals for up to two years following the completion of treatment. Follow-up response rates were higher for women but overall fairly low which can be expected for this population. More than half of those participants who completed follow-up interviews continued to abstain from alcohol and/or other chemicals and regularly attend support group meetings. Family and social supports tended to be more significant for women which is reflected in the overall older adult population. Project funded by a grant from the Minnesota State DHS

EVERYDAY PROBLEM-SOLVING STRATEGIES: EXAMINING AGE AND SEX DIFFERENCES IN VARYING DOMAINS

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The current study examined how age and sex of participants, and domain of the problem influenced the generation of problem-solving strategies. Participants, 136 younger adults ($M = 19.22$, $SD = 1.30$: 58 M, 78 F) and 81 older adults ($M = 73.17$, $SD = 7.76$: 38 M, 43 F) were given two hypothetical vignettes, one in the work domain, and one in the caregiving domain. Responses were coded for two instrumentally-oriented strategies (deliberation and self-action). A 2 (age) x 2 (sex) x 2 (form type) x 2 (domain) MANOVA indicated two significant three-way interactions for instrumentally-oriented strategies: domain by strategy by sex and domain by strategy by age. Results indicated that the reporting of deliberation strategies varied by domain, Wilks' $\Lambda = .835$, $F(1, 212) = 41.94$, $p < .001$, with participants more likely to report these strategies for the work domain. Sex differences emerged when participants responded for the caregiving domain vignette, with men more likely to report self-action strategies than women, $F(1, 212) = 6.52$, $p < .011$, $\eta^2 = .03$. Results also indicated that age was a significant variable, Wilks' $\Lambda = .979$, $F(1, 212) = 5.06$, $p < .025$. In the work domain, older adults were more likely to report deliberation strategies than younger adults, $F(1, 212) = 5.64$, $p < .018$, $\eta^2 = .026$. In the caregiving domain, older adults were more likely to report deliberation strategies, $F(1, 212) = 31.50$, $p < .001$, $\eta^2 = .129$, while younger adults reported more self-action strategies, $F(1, 212) = 17.20$, $p < .001$, $\eta^2 = .075$. These results suggest that domain, as well as age and sex, are important factors to be considered in examining problem-solving strategies.

SESSION 1785 (SYMPOSIUM)

HEALTH AND CARE FOR CHINESE ELDERS: RELIGION, INTERGENERATIONAL EXCHANGES AND SOCIOECONOMIC STATUS

Chair: I. Chi, *University of Southern California, Los Angeles, California*

In both the United States and China, the long predicted impact of global aging is already being felt. Although the objective health outcomes are similar, the self-perceived health tends to be different among the Americans and Chinese. In addition, the eldercare values differ between east and west. This symposium focuses on the health status and long term care services for older adults in China. Four papers examine the impact of different factors including religion and intergenerational support on the health and cognitive function among older Chinese adults. The last paper examines the conceptualization and professionalization of elder care services among residential institutions in China.

THE IMPACT OF SOCIOECONOMIC STATUS ON TRAJECTORIES OF COGNITIVE FUNCTION AMONG OLDER CHINESE ADULTS

Y. Li, I. Chi, *School of Social Work, University of Southern California, Alhambra, California*

Objectives: This study examines the effects of socioeconomic status (SES) on the trajectories of cognitive function among older adults in China. **Methods:** Data came from the longitudinal China Health and Nutrition Survey (CHNS). Using latent growth curve models, this study estimates the trajectories of cognitive function among 2,345 older adults aged 55 and above from 1997 to 2006. Cognitive function was measured using questions selected from Mini-Mental Status Exam (MMSE). **Results:** Higher education is associated with better cognitive functions at baseline as well as less steep declines over time, supporting the cumulative advantages hypothesis. Occupational class and income did not lead to diverged cognitive function at old age, but their effects persisted into old age. **Discussion:** This study demonstrates the effect of SES on cognitive function continued over time, and the effect varied by the components of SES examined.

INTERGENERATIONAL SUPPORT AND SELF-RATED HEALTH FOR CHINESE OLDER ADULTS IN ONE-CHILD FAMILY—THE DIFFERENCE BETWEEN URBAN AND RURAL AREAS

L. Xu, I. Chi, *USC, Monterey Park, California*

As a result of the one-child policy, increasing number of older adults has only one child in China, which puts pressure on the traditional family-based support system. Data (N=1101) were a sub sample of people aged 60 or over who participated in the nationwide 2000 Sample Survey on Aged Population in Urban/Rural China (SSAPUR). Intergenerational support was measured through structural, instrumental, financial and emotional support. Findings from the hierarchical regression showed that only emotional support ($t=3.93, p<.001$) in urban area and financial support ($t=4.36, p<.001$) in rural area influenced older adults' self-rated health after controlling for demographic variables. Intergenerational support explained 28.8% and 30.7% variances in self-rated health for urban and rural older adults respectively. The results suggested that health benefits from emotional and financial support should not be ignored when developing elder care policy in China to meet the needs of the one-child older adults in the coming years.

SPECIALIZATION OF AGING SERVICES IN CHINA'S LONG-TERM CARE

H.J. Zhan, *Sociology, Georgia State University, Atlanta, Georgia*

This paper exams the conceptualization and professionalization of elder care services among residential elder-care institutions in China. Based on a study conducted in 2008 in 23 elder care institutions with data drawn from over 1400 residents, this study reveals a high level of ambiguity in ownerships of elder care institutions. Furthermore there is a lack of specialization and professionalization in types of elder care services. The author argues that the social context and social system in China may have contributed to the current confusion in conceptualization and professionalization. Yet to meet the demands for the growing Chinese baby boomers in both urban and rural China, clear definitions and specifications in aging services will be a necessary step to promote both the growth of aging services as well as quality control of such services.

CONSEQUENCES OF CARING FOR GRANDCHILDREN ON GRANDPARENTS' HEALTH: THE CASE OF CHINA

F. Chen, G. Liu, *Sociology&Anthropology, North Carolina State University, Raleigh, North Carolina*

Using a longitudinal dataset (China Health and Nutrition Survey), we investigate the effect of grandparent caregiving on their health trajectories in China, a setting where it is normative for grandparents to

provide routine care for grandchildren and yet virtually nothing is known about the health consequences. This study overcomes limitations in the existing literature in the following ways: 1) we use a general sample of older adults, including both grandparents and non-grandparents, and those who provide help and those who do not; 2) we examine a range of caregiving involvement provided by grandparents; 3) we use multiple indicators of health; 4) we use longitudinal data analytical techniques to make stronger causal inferences. Finally, rich community level data provide us with the opportunity to contextualize the analysis, given that rapid socioeconomic changes and massive out-migration in the rural areas may change demands, normative expectations and resources related to childcare.

SESSION 1790 (SYMPOSIUM)

HEALTH BEHAVIORS AND HEALTH CONTROL IN MID- AND LATER LIFE: EVIDENCE FROM QUANTITATIVE AND QUALITATIVE STUDIES

Chair: *T. Pudrovska, Sociology, University of Texas, Austin, Texas*

Discussant: *D. Carr, Rutgers University, New Brunswick, New Jersey*

Chronic diseases become increasingly prevalent in mid- and later life. It is well documented that lifestyle affects the onset and progression of chronic conditions, yet factors associated with optimal health behaviors are less understood. The purpose of this symposium is to integrate two levels of the analysis of health behaviors and health regulation. On the one hand, we present quantitative analyses of the distribution of health beliefs and behaviors at the population level. On the other hand, findings from qualitative studies reveal how health behaviors are constructed and negotiated at the dyadic level of couples in long-term relationships. The quantitative papers in this symposium are based on two longitudinal large-scale surveys of aging. Pudrovska compares health control beliefs among cancer survivors and individuals without cancer to analyze how perceptions of controllability of health change after cancer. Storch examines how employment and occupational characteristics in late midlife predict changes in men's body mass index during the transition to old age. The qualitative studies are based on in-depth interviews with middle-aged and older couples. Paying particular attention to the consequences of aging for dyadic interactions, Reczek explores the ways in which same-sex and opposite-sex couples negotiate and regulate eating, drinking, and exercise habits. Umberson examines gendered processes of health regulation and control in marriage as a form of emotion work for wives and husbands. Taken together, these papers provide a multifaceted view of health behaviors as shaped by the interplay of socio-cultural influences at the macro-level and dynamic interactive processes at micro-level.

"HEALTH DEPENDS ON THINGS I DO": AGE AND COHORT DIFFERENCES IN THE EFFECT OF CANCER ON HEALTH CONTROL BELIEFS

T. Pudrovska, *Sociology, University of Texas, Austin, Texas*

Using two waves of the National Survey of Midlife Development in the United States, I compare longitudinal changes in health control beliefs among cancer survivors and individuals without cancer. Moreover, I examine age and cohort differences in the perceptions of controllability of health after cancer. The theoretical framework of this study integrates competing views of cancer as a stress process and as a positive catalyst. Findings from three-level random-coefficient models support both views. In 1940s, 1950s, and 1960s birth cohorts, the sense of mastery over one's health increases with age for cancer survivors while declining for persons without cancer. Conversely, in the 1920s and 1930s cohorts, having cancer is associated with a steep decline in health control beliefs over time. These findings suggest that health control beliefs are shaped by the interplay of developmental and socio-cultural influences. Seemingly idiosyncratic psychological reactions to cancer reflect macro-level processes represented by cohort differences.

GENDER, HEALTH HABIT REGULATION, AND EMOTION WORK IN LONG-TERM RELATIONSHIPS

D. Umberson, 1. *Sociology, University of Texas, Austin, Texas, 2. Population Research Center, Austin, Texas*

Survey research suggests that spouses attempt to regulate and control their partner's health habits. Moreover, women are more likely than men to impose regulation and control and men are more likely than women to be the recipients. We go beyond statistical patterns of gender, regulation efforts, and health habits to examine underlying processes through which these patterns emerge. Qualitative data from 62 in-depth interviews with men and women (31 couples) in long-term marital relationships suggest that health regulation is a form of emotion work that is more likely to be performed by women than men but that health problems of a partner often lead to change in this process, particularly for men who begin to devote more time and concern to monitoring their wife's health.

BREADWINNING AND WEIGHT: EXAMINING THE EFFECT OF EMPLOYMENT AND OCCUPATIONAL CHARACTERISTICS ON THE BODY MASS INDEX OF OLDER MEN

J. Storck, *University of Texas, Pflugerville, Texas*

Overweight and obesity have been studied extensively as important risk factors for multiple chronic conditions that develop with advancing age. However, researchers of aging have paid relatively little attention to the influence of later-life economic activity on older men's weight. Using two waves of the Wisconsin Longitudinal Study, I examine the effects of employment and occupational characteristics on men's body mass index (BMI) in late midlife and early old age. In this cohort of older White men who have adhered to clearly demarcated gender roles and placed a high emphasis on their breadwinning activity over the life course, employed men exhibited a greater increase in BMI with age than their peers who were out of the labor force. Yet, characteristics of men's occupation, such as occupational income and education, were associated negatively with men's BMI. I discuss these findings with respect to the social selection and causation mechanisms.

SESSION 1795 (PAPER)

HEALTH PROMOTION MESSAGES FOR OLDER ADULTS

THE BABY BOOM GENERATION OF AFRICAN AMERICAN AND AFRO-CARIBBEAN WOMEN: THE EXPLORATION OF COHORT EFFECT AND OBESITY

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Obesity, defined as an unhealthy excess of body fat, is a growing problem in the United States which is disproportionately increasing among African Americans and persons of African descent, such as Afro-Caribbean. Although obesity is a public health concern among all adults, the baby boom generation, persons aged 44-62 (born between 1946 and 1964), are often overlooked by health care providers, researchers and policy makers. Statistical projections found the highest rates of obesity can be found among baby boomers and are expected to increase over the next two decades, particularly among women aged 50 and over. Longer life expectancy in the baby boom generation coupled with highest rates of obesity, suggest that obesity will adversely affect multiple chronic conditions such as cancer, diabetes, heart disease, high blood pressure, osteoarthritis, and Alzheimer's disease. Given the above projections, it is important to understand how cohort effects influence eating habits, physical activity and perceptions of obesity among older, African American and Afro-Caribbean women. A qualitative focus group methodology was employed to address this area by conducting four focus

groups (n=26), ages 41 to 60 years of age, divided based on ethnicity and socioeconomic status. Primary themes derived from the data revealed how exposure from environmental and societal factors influence cooking traditions, eating preferences, physical activity and perceptions of body weight and obesity. Implications for practice suggest that birth cohort must be integrated into health prevention and intervention programs, in order to effectively address weight loss and healthy behaviors.

ENVIRONMENTAL IMPACT ON OBESITY IN COMMUNITY DWELLING OLDER ADULTS

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Introduction: While we have considerable evidence as to the role of physical activity and nutrition on obesity, relatively less is known about the environmental correlates of obesity among older adults. This study examines the role of environmental risk factors in obesity among community residing older adults. Methods: Interviews were conducted with 884 adults aged 65 and older, residing in four areas in the U.S.: Alameda County, CA; Cook County, IL; Allegheny County, PA and Durham/Wake Counties, NC. Participants provided self-report data on demographics, general health, and attitudes/beliefs towards walking. Assessments of the neighborhood were based on the modified Neighborhood Environment Walking Survey (NEWS). Subscales of the NEWS survey include access to services, land use, street connectivity, places for walking, neighborhood surroundings, traffic safety, and safety from crime. Bivariate analyses examined the relation between BMI and environmental, demographic, and physical characteristics. Multinomial regression analyses were conducted to examine significant neighborhood characteristics while controlling for demographics. Results: BMI was associated with access to services, neighborhood surroundings, and safety from crime summary scores. After controlling for demographic characteristics, access to services remained significant. That is, older adults who reported less availability of services in their neighborhood were more likely to have a greater BMI. Discussion: The findings suggest that access to resources in the neighborhood, such as access to grocery stores and mass transit options should be considered in the context of educational health promotion interventions to maintain and promote healthy weight among older adults.

EXERCISE MOTIVATION AND FITNESS THROUGH DOG WALKING AMONG OLDER ADULTS

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Background: The rising rate of obesity in older adults is linked with the national problem of limited physical activity (PA), resulting in chronic illness. Older adults who walk dogs have been found to maintain physical functioning over a 3 year period (Thorpe 2006). Research questions: To what extent do older adults in a shelter dog walking (DW) group, have better physical function, physical activity, mood, social support and weight loss than those in a human walking companion (HWC) group or a no-treatment control (C) group? What are the participants' perceptions of the walking program? Methods: A three-group, repeated measures design tested efficacy of a 12-week (5 days/week) DW program for adults over age 65. To control cross-group contamination, each of three retirement facilities were assigned to a group. The DW group selected a dog matching their walking capability & walked at the animal shelter. The HWC group identified a walking partner & walked at their residence. Results: 54 adults participated {DW n=12, HWC n=23 & C n=19}. Fourteen males & 40 females, ranged in age from 67-93 years (Mean=85). The 6-minute walk compared pre and post for the DW group showed a 28% increase (p=0.012), the HWC had a 4% increase (p=0.32)

and the C group a 6% increase ($p=0.18$). Conclusions: Participants in the DW group immediately expressed affinity for the shelter dogs. The DW group had significantly improved walking speed. Dog walking may be a beneficial way to improve or maintain functioning in older adults.

EFFICACY OF DIFFERENT EXERCISE PROGRAMS ON COGNITIVE FUNCTION IN PERSONS WITH ALZHEIMER'S DISEASE

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Dementia is one of the leading causes of death. Today about 13 % of Americans (7 % of Germans) aged 65 years and over have Alzheimer's disease (AD). AD is characterized by a severe loss of cognitive abilities such as processing speed and executive function. There is hopeful evidence that physical activity could be an effective approach to improve cognitive performance of older people. There exist only few intervention studies with AD patients. These studies are mostly based on endurance training. Only little is known about the benefits of strength training. The objective of the present study was to examine the effects of different training programs on different cognitive abilities. 34 persons (32% women) with AD underwent cognitive tests (processing speed, word fluency, executive function, reaction time). The sample had a mean age of 73 years and a MMSE score of 24. The sample was randomized into two intervention groups (endurance: $n=8$; strength: $n=11$) and one control group ($n=15$). The groups did not differ in age and MMSE score. After 3 months of training, the participants in both training groups showed notable (but statistic not significant) improvements in all tests of cognitive function compared to the control group. Processing speed and executive function was enhanced in the strength training group. Word fluency and reaction time was rather improved in the endurance training group. Although not significant, these results emphasize the assumption that endurance and strength training have benefits and provoke heterogeneous mechanisms which are responsible for improvements of cognitive functions.

TO BE ACTIVE OR NOT TO BE INACTIVE

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Introduction: Younger adults engage more in health promoting behaviors when information is framed in terms of gains rather than losses and when the framing matches their approach/avoidance motivation focus. This study examined, if gain framing of health messages is effective in promoting walking among older adults. Given older adults' increased attention to positive information as predicted by Socioemotional Selectivity Theory, we expected that gain framing would have an advantage over loss or neutral framing. Methods: Younger adults ($n=65$, mean age=21.43) and older adults ($n=57$, mean age=74.84) received information about walking that either explained physiological information about walking in neutral terms or was framed in terms of potential gains resulting from walking or potential losses resulting from not walking. Participants' walking was monitored for one week using pedometers. Results: Younger adults walked more than older adults (meanYA=56691.52, meanOA=31089.98, $p<0.001$). Younger adults walked the same amount of steps in the gain (mean=53658.15), loss (mean=58837.95), and neutral (mean=57302.68) framing conditions. However, older adults walked the most steps when they were given gain framed (mean=39080.19) rather than loss (mean=22048.94) or neutrally framed (mean=30860.18) information ($p<0.05$ for gain versus loss and for gain versus loss or neutral). In fact, in the gain frame condition, the difference in number of steps taken per week between younger and older adults was reduced to marginal significance ($p=0.08$). Conclusion: Framing information in terms of potential gains of pursuing physical activity promotes walking among older adults.

SESSION 1800 (SYMPOSIUM)

HUMAN COMPUTER INTERACTION ISSUES FOR OLDER ADULTS

Chair: W.A. Rogers, *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*

Discussant: E.D. Mynatt, *Georgia Institute of Technology - School of Interactive Computing, Atlanta, Georgia*

Advanced technologies are prevalent in our environments – at home, at work, and in most other facets of our lives including healthcare, transportation, and leisure activities. In many contexts technology interactions are no longer optional but instead necessary to achieve a goal or perform a task. Older adults face unique challenges interacting with advanced technologies for myriad reasons including age-related perceptual and cognitive changes as well as perhaps limited experiences with technologies in general. The focus of this symposium will be on human-computer interaction (HCI) issues for older adults. Charness et al. will discuss a modeling technique that enables predictions of performance and likelihood of errors for older technology users. Czaja et al. will focus on use challenges in the workplace for communication technologies. O'Brien et al. will describe analyses of interactions with everyday technologies and the mediating role of technology experience. Beer et al. will explore the potential of virtual agents to provide information and task support to older adults. The discussant will be Elizabeth Mynatt who is Director of the Gvu Center and Associate Professor of Interactive Computing. She will provide her perspective as a computer scientist regarding the pressing needs for HCI research targeted to older adults. This symposium will provide in-depth examples of the HCI issues that must be considered if older adults are to be successful interacting with advanced technologies and maintaining their quality of life and independence.

OLDER WORKERS AND COMMUNICATION TECHNOLOGY: IMPLICATIONS FOR TRAINING AND EMPLOYMENT

S. Czaja¹, C. Lee¹, V.L. Hanson², A.F. Newell², J.T. Richards³, L. Gibson², *1. University of Miami Miller School of Medicine, Miami, Florida, 2. University of Dundee, School of Computing, Dundee, United Kingdom, 3. IBM T. J. Watson Research Center, Hawthorne, New York*

Today's workplace requires the use of multiple communication technologies such as e-mail, video conferencing and instant messaging. The use of these technologies means that workers are constantly bombarded by the need to respond to requests from co-workers/supervisors. This may be problematic for older workers because of limited familiarity with these technologies and age-related cognitive changes which may make them more prone to disruptions. We explored these issues with 52 adults (aged 55+) who viewed a scenario where communication technologies were introduced into a workplace and discussed the potential impact of modern communication technologies on work behaviors. Most participants indicated that modern communication technologies may decrease ability to focus at work, quality of interactions with co-workers and negatively impact on worker collaborations. However, the majority expressed interest in learning these applications. These findings will be discussed in terms of strategies to increase the successful participation of older adults in today's workplace.

BENEFITS OF GOMS ANALYSIS FOR DESIGN FOR OLDER TECHNOLOGY USERS

N. Charness¹, T. Jastrzemski², *1. Psychology, Florida State University, Tallahassee, Florida, 2. Air Force Research Laboratory, Mesa, Arizona*

Aging adult cohorts lag behind their younger counterparts in adoption of technology products such as mobile phones, computers, and the Internet. Technology adoption depends on factors such as access, motivation, ability, design, and training. Adequacy of design is often evalu-

ated through usability testing of products. Such testing can be time consuming and expensive. Modeling offers an alternative that can often pinpoint design flaws. Card, Moran & Newell's (1983) Goals, Operators, Methods, Selection rules (GOMS) modeling offers a good first approximation modeling approach. We have recently extended GOMS modeling to take into account older adult information processing abilities and have used it to model performance on mobile phone tasks. We will present tips on how to ensure reliability in modeling, and discuss how GOMS can be extended to predict not just performance time, but also accuracy. We will also highlight some non-obvious insights that can be gleaned from GOMS analysis.

EXAMINING ENCOUNTERS WITH EVERYDAY TECHNOLOGIES AMONG YOUNGER AND OLDER ADULTS

M. O'Brien, *Psychology, University of Alabama, Huntsville, Huntsville, Alabama*

In order to successfully complete activities of daily living, older adults must adopt an evolving repertoire of new and improved technologies. The fact that these technologies are being adopted (e.g., DeFalco, 2009 March) suggests that these technologies are appropriately designed for them. Longer lag times to adoption than younger generations, however, suggest that effective use may be based on different strategies. This research study systematically examines encounters younger and older adults have with everyday technologies, such as cell phones and fitness machines, that are designed for use with no training and minimal instruction. The presentation will present results from our study of younger adults and older adults with high and low technology experience about their encounters with these everyday technologies over a ten day period. We will focus on factors contributing to first-time success and effective problem-solving in the face of errors.

RECOGNIZING SOCIAL CUES WHEN INTERACTING WITH VIRTUAL AGENTS: WHAT LEADS TO EMOTION MISATTRIBUTIONS?

J.M. Beer, A.D. Fisk, W.A. Rogers, *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*

Virtual agents are increasingly applied to healthcare and domestic domains to address problems such as medication management, diet and so on. These agents must socially interact and communicate with users through simulated face-to-face communication. Understanding how people interpret social cues presented by virtual agents is important for design of agents whether virtual or not. Indeed, there is little or no systematic research exploring emotion recognition when interacting with machine agents. This fundamental knowledge is crucial for proper human-machine interaction. We investigated older and younger adults' recognition of facial expressions produced by a virtual agent. We will present a recognition confusion matrix illustrating the locus of age-related differences and deviations from human facial expression recognition. We will focus on the errors made when identifying the virtual agent's emotions and also present design recommendations for virtual agents that interact and communicate with older adults.

SESSION 1805 (SYMPOSIUM)

LIFE IN THE PAST LANE: REFLECTIONS IN A REVIEW MIRROR

Chair: G.T. Reker, *Trent University, Peterborough, Ontario, Canada*
Discussant: B. Haight, *Medical University of South Carolina, Charleston, South Carolina*

We live life forward, but understand it backward. Much has been learned about the psychosocial benefits of autobiographical methods but less is known about the processes that operate when participants report having grown personally. Using self-reports of guided autobiography participants, Reker et al. find structural changes over time to the self-system, coupled with positive evaluations of others and life at pres-

ent. Svensson reports on the anticipated and actual evaluations of usefulness, value, importance, and impact of various components of guided autobiography, and notes shifts towards increased group cohesion, closer family ties, and greater spiritual connectedness. Cappeliez and Drouin investigate the self-reflections of older adults regarding reminiscence. They report that the identity function predominates, that reminiscence and emotions are intertwined, and that reminiscence is both an index of good memory and a pathway to avoiding dementia. Participants' reflections on a life can be captured by way of the life-line interview method. Pierce and Schroots report on the spatial distribution of life events across the life course, noting a sharp peak for life events between the ages of 10 and 30 (the bump) and a flattening of distances for life events in adults over 70. Schroots charts the life course over a 5 year period in terms of number, affect, and content noting that most bump-period memories are positive with emphasis on personal and interpersonal life domains.

SELF-ASPECT RECONSTRUCTION THROUGH GUIDED AUTOBIOGRAPHY: EXPLORING UNDERLYING PROCESSES

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This research explores possible reconstruction processes involving the self-system (actual, ideal, and social image selves) of participants taking part in guided autobiography (GAB). Ten young and eleven older adults met each week for 12 weeks. Data were collected at pretest, midtest, and posttest. Three indicators of structural change were measured and analyzed: self-aspect congruence, self-aspect integration, and self-aspect consistency. For all participants, results revealed a significant increase over time in self-aspect congruence (actual/ideal and actual/social image) and self-aspect integration (actual self only), while self-aspect consistency remained constant and high. Compared to younger adults, older adults showed significantly greater congruence in actual/ideal and actual/social image self aspects following the GAB experience. Moreover, greater self-aspect congruence was associated with positive evaluations of others and life at present. Our findings provide us with an understanding of the underlying mechanisms that operate when individuals, particularly older participants, report having grown personally through GAB.

ANTICIPATED AND ACTUAL EVALUATIONS OF THE COMPONENTS OF GUIDED AUTOBIOGRAPHY

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Participants in Guided Autobiography (GAB) classes come in with their own preconceived ideas about the class, e.g., how it will be structured and what they will be expected to do. Most come in with the simple goal: to write their life story. However, GAB builds on a process that emphasizes small group work, writing on increasingly sensitive themes, and personal sharing of one's writing. Twenty-one young and older participants met each week for 12 weeks during the 2007 Fall semester. The themes, elements, and processes of GAB were assessed pre- and posttest. Significant changes occurred in all areas. For instance, the greatest change was seen in the usefulness of reading their writing in the small group, as well as active participation in the group. Qualitative comments from the participants and reflections of GAB by the group facilitators are discussed to further clarify the power of the GAB process.

WHAT DO OLDER ADULTS THINK OF REMINISCENCE?

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This research investigates the implicit theories of older adults regarding reminiscence. A semi-structured interview was conducted with eight

older adults (average age: 77.3 years). Contents were analyzed by three researchers who followed the method of grounded theory. Five main themes emerged. The identity function of reminiscence is the one that predominates. Reminiscence and emotions are intertwined: emotions characterize reminiscence and reminiscences are used to manage emotions and foster adaptation. Some reminiscences occur spontaneously while others are intentional, each type having its own triggering context. Interpersonal relations are at the core of reminiscence. Finally, reminiscences are considered as both an index of good memory functioning and a way to exercise memory in order to avoid dementia. These findings provide further insight on the contribution of reminiscences to psychological adaptation in later age.

THE SPATIAL DISTRIBUTION OF LIFE EVENTS USING THE LIFE-LINE INTERVIEW METHOD

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Ninety-eight adults (18 – 84 years) drew life-lines documenting the course of their lives using the Life-line Interview Method (LIM) (Schroots et al., 2003). Participants labeled significant life events on the life-line and provided their chronological age for each event. For each of 500 life events identified, we recorded both the chronological age for the event and the distance across the life-line at which the event was labeled. Consistent with previous research, the frequency distribution of chronological ages for life events shows a sharp peak between the ages of 10 and 30. However, the frequency distribution of distances across the graph for life events is considerably more flat, especially for adults over 70. This pattern indicates that, for older adults, events from the teens and 20s are not merely reported more frequently; they occupy a disproportionately larger portion of LIM life-lines depicting the perceived locations of events across the life course.

THE DYNAMICS OF AUTOBIOGRAPHICAL MEMORY

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The Amsterdam Longitudinal Study of Autobiographical Memory (ALSAM) covers a period of five years in which the Life-line Interview Method (LIM) was administered three times to a group of 98 young, middle-aged, and older men and women (18-84 yrs). The life-course dynamics of memories and expectations were analyzed from the perspective of number, affect and content of life-events. Salient results will be presented with the focus on the emergence of the AM 'bump' over the adult lifespan. Memories from the bump-period (10-30 yrs) are mostly positive memories, belonging to the categories 'Begin Relations' (e.g. in love), 'Commitment' (e.g. marriage), 'Birth Child' (e.g. children), 'Finishing School' (e.g. graduating), and 'Beginning Work' (e.g. first job). Computer simulation (Janus model) of general physiological performance and ALSAM data supports the hypothesis that the relatively more intensive, neural encoding and storage of information in the bump period underlies the emergence of the AM bump in older adults.

SESSION 1810 (PAPER)

LIVING AND DYING WELL

QUESTION ASKING BY FAMILY CAREGIVERS IN HOSPICE INTERDISCIPLINARY TEAM MEETINGS

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This project is part of a larger National Cancer Institute funded intervention to improve communication between hospice staff and caregivers.

The project utilized portable videophones to facilitate caregiver participation in hospice team meetings. This data was collected from 36 video-recorded team meetings from 12 caregivers who participated in the intervention phase of the study. A qualitative content analysis was conducted to obtain the frequency, type, and content of questions asked by caregivers and staff. Hospice staff asked almost three questions to every one question asked by a family caregiver. Both caregivers and staff predominantly asked direct (Yes/No) questions. Clarification, coordination of care, technical quality, and prompt questions demonstrated the task function of the IDT meeting. Questions regarding medication/pain management, patient symptoms, and the patient's overall condition indicate that the emphasis of IDT meetings between staff and caregivers is the patient's physical care. Findings suggest that the videophone conference provided the opportunity for direct communication about plans of care.

FALLS IN HOSPICE: EXAMINING OCCURRENCE AND RISK FACTORS FOR FALLS IN A VULNERABLE POPULATION

M. Bhatnagar, H. Degenholtz, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Falls are recognized as a major cause of morbidity in elderly and frail populations. Falls have been shown to result in injury, loss of independence and reduced quality of life in the geriatric population. While intuitively, one would expect similar consequences from falls among hospice patients, there are currently no data available as to the prevalence of falls or risk factors associated with falls in the hospice population. We examined the prevalence of falls among patients receiving hospice care at home, nursing home or inpatient hospice unit and determined the risk factors associated with falls in the hospice population. We analyzed secondary data at the provider level accessed from a national quality improvement benchmarking database that includes organizational characteristics, case mix and the rate of falls. Independent variables include patient volume, type of setting (home, nursing home, inpatient), process of care (e.g. number of weekly visits per discipline), quality practices (e.g., as percentage of physicians who are board certified). Dissemination of these results would enhance understanding of the nature of falls among hospice patients and lead to assessment and management tools that would be specific to the hospice population. Evidence of variation in rate of falls among providers suggests that there are opportunities for to improve quality of care, however further research is needed on the consequences of falls and treatment guidelines for falls with injury in this population.

STRUGGLE OVER "THE LITTLE THINGS": SOCIAL WORKERS AND ETHICAL DILEMMAS IN HOSPICE

M. Dennis, *University of Michigan, Ann Arbor, Michigan*

The world of hospice patients has often been reduced to a room or a bed where "the little things" become important for expressing autonomy and control. Little attention is given to the ethical dilemmas faced by social workers as they help patients' efforts to maintain control. This qualitative study utilized semi-structured interviews (N=14) to explore the ethical dilemmas master's level social workers encounter in a hospice setting. Findings suggest: 1) social workers are internally conflicted over obeying hospice rules and meeting the hospice clients' needs to maintain control over "little things" such as being able to walk outside, to receive mail, and to spend money; and 2) social workers utilize internal problem solving processes and design solutions that often benefit the patient. This study offers insight into the impact and power social workers can have in hospice patients' efforts to maintain autonomy and control.

ENHANCING QUALITY OF LIFE FOR COMMUNITY-DWELLING FRAIL ELDERLY: PALLIATIVE CARE AT HOME

E. Chichin, O.R. Burack, T. Adamski, A.L. Kreiser, *Jewish Home Lifecare, New York, New York*

While hospice services for the dying have long been the accepted model of care, the use of non-hospice palliative care for chronically ill individuals in the community is relatively new. Given that the bulk of frail elderly with chronic illnesses reside in the community, the need for such initiatives is great. Described here are the development, implementation, and initial findings of a palliative care program within a home health care program. Included in the initiative were a palliative care education program for all levels of clinical staff, including nursing aides and escort-translators, a modification of extant telehealth technology to identify palliative care issues, and hiring a 1/2 time palliative care consultant. In its first year, 53 homecare clients were referred to palliative care. The majority of referrals (69.3%) were made by home care nurses, with 22.5% made by social workers. Four referrals came through non-video telehealth monitors, where clients indicated that they had symptoms that would benefit from a palliative intervention. Of the 53 clients referred to palliative care, 40 clients were referred for pain-related issues, generally of a chronic nature. Recommendations for management ranged from medication changes to referral to pain clinic to increased socialization. This model with its palliative approach to care can be adapted with relative ease and can potentially enhance the quality of life and quality of care of frail, community-dwelling elders.

SESSION 1815 (SYMPOSIUM)

METACOGNITION IN ADULTHOOD AND AGING: BELIEFS, MONITORING, AND SELF-REGULATORY CONTROL

Chair: C. Hertzog, *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*

Discussant: C. Hertzog, *School of Psychology, Georgia Institute of Technology, Atlanta, Georgia*

Metacognition involves the beliefs, knowledge, and awareness about one's own cognition, including monitoring current status of cognitive processes. Monitoring one's cognitive performance allows effective self-regulation of performance, because one can make informed strategic decisions about how to achieve performance goals. For example, if monitoring a retrieval attempt indicates that information cannot be accessed, one can engage in additional attempts to learn the desired information, perhaps by changing learning strategies. Recent research has shown that there are age differences in some aspects of metacognition, but not others. For example, older adults generally have lower memory self-efficacy and perceived control over memory, which predicts whether they will use effective strategies for learning and remembering. On the other hand, older adults have been shown to monitor learning and some aspects of retrieval as well as younger adults. The proposed symposium reviews new research on older adults' beliefs about memory, including correlates of personality and leisure activities with memory beliefs. Pearman and Trujillo report on predictors of older adults' memory complaints. Jopp describes relationships of memory self-efficacy and control with self-reported activities. The symposium also contains two papers reporting evidence that older adults use metacognitive monitoring to effectively control learning when the task context affords it. Hines shows that older adults' subsequent study time allocation is influenced by confidence in accuracy of their memory. Price shows that older adults' selection of new items to study is similar to younger adults' selections. These papers contradict the hypothesis of age deficits in metacognitively-guided control.

AGE DIFFERENCES IN PREDICTORS OF CHANGE IN SELF-ASSESSED MEMORY

A. Pearman, A. Trujillo, *Georgia State University, Atlanta, Georgia*

Understanding what causes changes in memory perceptions is an important step to understanding and treating older adult's memory complaints. This study was designed to examine the role of age, memory beliefs, and personality in changes in self-assessed memory over the course of a study. Using a sample of 51 younger ($M = 21.19$ years, $SD = 3.22$) and 59 older ($M = 76.83$ years, $SD = 8.28$) adults, participants were first asked to rate their overall memory ability, were then given a series of memory and cognitive tasks (1.5 hours), and were then asked again to rate their overall memory. For younger adults, changes in self-rated memory were related to overall perceived task performance and general memory self-efficacy; whereas for older adults, changes in self-rated memory were related to higher perceived performance and neuroticism. Actual performance on the memory tasks was not related to changes in perceived memory ability.

PREDICTING MEMORY PERFORMANCE IN A LIFESPAN SAMPLE: COMPARING THE ROLE OF SELF-REPORT ACTIVITIES, MEMORY BELIEFS, AND STRATEGY USE

D. Jopp, *Psychology, Fordham University, Bronx, New York*

Everyday activities have been investigated with respect to constructs of successful aging and prevention of age-related cognitive decline. In order to explore the specific paths involved, we related self-reported activities to memory beliefs, memory strategies and memory performance in a sample of 267 individuals aged 18 to 85 years. Memory beliefs were assessed with a memory action control measure, measuring self-efficacy, means-ends, and control beliefs (Jopp & Hertzog, 2009). Memory strategies were indicated by retrospective reports on strategies use during encoding. Memory performance was based on two paired associate memory tasks. Findings indicate that activities were predictive of memory strategy use, and memory performance. Activities were more strongly linked to the action control measure than to other belief measures. Specific activities (e.g., technology use) were independent predictors of memory performance, when controlling for age, beliefs, and strategies. In sum, activities, strategy use, and action control beliefs are valuable in predicting memory.

METACOGNITIVE INFLUENCES ON STUDY TIME ALLOCATION: AN ANALYSIS OF AGE DIFFERENCES

J. Hines, *Psychology, Georgia Tech, Atlanta, Georgia*

Metacognitive control involves the use of accurate monitoring to adjust cognitive processing to achieve performance goals (Nelson & Narens, 1990). Two experiments involving paired-associate learning examined age differences in the monitoring-control relationship, relating metacognitive measures collected during an initial learning trial to study time allocation during a second trial. Our hypothesis (Hines, Touron, & Hertzog, 2009) was that trial 1 metacognitive measures would account for variance in trial 2 study time independent of trial 1 objective performance measures. Gamma correlations and multilevel regressions supported this hypothesis; both objective measures (e.g., test RT and accuracy) and metacognitive measures (judgment of learning, test confidence, and perceived test RT) exerted independent influences on trial 2 study time allocation. However, contrary to Dunlosky and Connor (1997), no evidence was found of an age-related deficit in metacognitive control over allocated study time. Older adults use monitoring effectively to regulate self-paced study.

SELF-REGULATED LEARNING: DOES AGING AFFECT METACOGNITIVE CONTROL?

J. Price, *Department of Psychology, University of Alabama in Huntsville, Huntsville, Alabama*

Three experiments examined whether participants' self-paced study (item selection and study time allocation) behaviors conformed to the

region of proximal learning (RPL) model when studying normatively easy, medium, and difficult Spanish-English vocabulary pairs. Experiments 1 and 2 found that younger and older adults selected items for study in an easy-to-difficult order, indicating that the RPL model applies to older adults' self-regulated study, even when the value of recalling vocabulary pairs was manipulated by assigning points in Experiment 2. Individuals allocated more time to difficult items, but prioritized easier items when given less time or point values favoring difficult items. Older adults studied more items for longer time and still realized lower recall than younger adults. Experiment 3 randomized the previously static presentation order within grids and manipulated whether younger, middle age and older adults were informed about normative item difficulty. Preliminary results suggest that these manipulations eliminate RPL-consistent selection effects.

SESSION 1820 (SYMPOSIUM)

NOT TO BE OVER-LOOKED: THE IMPORTANCE OF PHYSICAL ENVIRONMENTS FOR PEOPLE WITH DEMENTIA IN LONG-TERM CARE

Chair: P.J. Doyle, *University of Maryland, Baltimore County, Baltimore, Maryland*

Discussant: M. Calkins, *IDEAS Institute, Kirtland, Ohio*

The physical environment is an important factor to consider when examining individuals' aging processes. Environmental gerontology has a strong body of work grounded in theory which has enabled its' continual growth as a sub-discipline. This symposium will discuss four components of environmental gerontology: theory, evaluation, psychosocial implications, and ethics. A crucial topic in this field is the design of long-term care environments for people with dementia. Theory, both informal and formal, informs how we choose to design our physical environments. These environments are designed to best "fit" the people living there (taking into account their abilities and possible limitations). Once established, it is important to assess the environment to determine how it is both helping and hindering the residents. This symposium will include an evaluative study of 26 Specialized Care Units which used the Professional Environmental Assessment Protocol to determine positive and negative aspects of these environments for people with dementia. To address the psychosocial implications of physical environments, another study preformed in a dementia care setting which looked at how environmental design (e.g., proximity of room to dining room tables) can impact the social interactions of people with dementia will be discussed. This symposium will conclude with the ethical concerns inherent in gerontological studies of environments in particular settings for people with dementia. The multi-faceted approach to this symposium will allow for a more complete look at the role of physical environments as we age.

THEORY DEVELOPMENTS IN ENVIRONMENTAL GERONTOLOGY: IMPLICATIONS FOR LONG-TERM CARE

H. Wahl, *University of Heidelberg, Heidelberg, Germany*

Environmental gerontology has argued from its inception that aging is shaped by physical environments and that the importance of physical contexts tends to be underestimated, because the scholarly (and practice) view predominantly focuses on the aging person. This paper aimed to serve with a conceptual discussion starts with meta-ideas of environmental gerontology, putting special emphasis on cognitive impairment and physical environment interactions. Classic theories such as the competence-press and person-environment fit model as well as more recent work (e.g., related to an enriched understanding of the concept of place) will be evaluated in terms of their current and future potential to better understand and optimize human development under extreme conditions, that is, in the situation of severe cognitive impairment and long-term care environments. The paper also addresses conceptual chal-

lenges coming with intercultural issues, contrasting the latest long-term care solutions in Europe with the North American sphere.

ENVIRONMENTAL ASSESSMENT OF SPECIAL CARE UNITS AND POLICY IMPLICATIONS IN VANCOUVER, CANADA

H. Chaudhury, *Gerontology, Simon Fraser University, Vancouver, British Columbia, Canada*

This study presents highlights from environmental assessment of twenty-six special care units in a major health region in metro Vancouver, Canada. Environmental assessment was conducted using Professional Environmental Assessment Protocol (PEAP), photo-analysis and floor-plan analysis. Eight environmental dimensions (e.g., awareness and orientation, support of functional abilities, etc.) based on responsive physical environments in dementia care were used to evaluate each unit and to conduct a comparative assessment of all the study sites. Design recommendations were made based on identification of possible low-investment renovations. The study was conducted as part of the regional health authority's initiative in developing a dementia strategy. A discussion of the role of environmental assessment in the macro policy environment will be included in terms of institutional and systemic challenges in policy and practice.

SOCIAL IMPLICATIONS OF DEMENTIA CARE ENVIRONMENTAL DESIGN: A CASE STUDY OF BEDROOM LAYOUT AND DINING ROOM SEATING

P.J. Doyle¹, K. De Medeiros^{2,3}, P. Saunders⁴, A. Mosby², M.E. Jeresano⁵, 1. *Gerontology, University of Maryland, Baltimore County, Baltimore, Maryland*, 2. *The Copper Ridge Institute, Sykesville, Maryland*, 3. *Johns Hopkins University School of Medicine, Baltimore, Maryland*, 4. *Georgetown University, Washington, District of Columbia*, 5. *Towson University, Towson, Maryland*

Many dementia care settings are being developed within long-term care. These residences often have unique environmental design to best serve this population. This paper draws from an ethnographic study investigating the factors influencing friendships between people in a dementia care assisted living. Observations showed dining to be a time of heightened social interactions but one that remained relatively static over time. Dining room seating was so routine and ingrained that it often became a source of conflict. Interestingly, the seating was not a product of the sociability "fit" of elders but rather was closely associated with the residents' room proximity to their dining room table. By influencing who ended up sitting at each table, the environmental design of this setting established specific social networks between elders. This paper will review this setting's environmental design and discuss the implications of its influence on the social world of people with dementia.

ETHICS AND ENVIRONMENT IN LONG-TERM CARE

R. Rubinstein, L.J. Clark, *Gerontology, University of Maryland, Baltimore County, Baltimore, Maryland*

Surveillance of residents with dementia in long-term care is often oriented to negative behaviors. This paper discusses what is not observed and what is observed in other ways. It raises questions about the extent to which nursing home residents can or should in fact remove themselves from surveillance. What are their rights in this regard? Does optimal treatment involve both scrutiny and the ability to withdraw from scrutiny?

SESSION 1825 (SYMPOSIUM)

NOW THAT WE ARE 85: INSIGHTS INTO AGING FROM THE AHEAD SAMPLE

Chair: E. Crimmins, *University of Southern California, Los Angeles, California*

Discussant: J. Guralnik, *National Institute on Aging, Bethesda, Maryland*

This symposium will provide a multifaceted understanding of the individual and population changes that occur with aging into and through the oldest-old years for a large-scale nationally representative sample of Americans. The Survey of Asset and Health Dynamics Among the Oldest Old (AHEAD), initially a subset of the Health and Retirement Study (HRS), is a study of more than 8,000 individuals born prior to January 1, 1924 and their spouses. The sample was interviewed for the first time between October 1993 and April 1994 and at that time ranged in age from 70 to 104. At the most recent, the eighth, interview in 2008, the youngest members of this cohort were 85 and the average age of the survivors was about 88. This dataset is enriched by the addition of Medicare, Social Security, and National Death Index matches for sample members. This symposium will describe major transitions over approximately 14 years as they go from the 70+ population to the 85+ population. Areas of focus include links between diseases and functioning ability, links between hospitalization and subsequent stroke and hip fracture diseases, social- psychological well-being and resources, and familial and support relationships. The symposium will clarify the multiple paths reflecting stability and change, both positive and negative, taken through these years when the transitions associated with aging affect most individuals. The role of gender and race, ethnicity as well as socioeconomic status in influencing outcomes will also be discussed. Long-term survivors have notably more positive experiences at earlier ages.

TRAJECTORIES OF PSYCHOSOCIAL STATUS DURING OLD AGE: CORRELATES AND ASSOCIATIONS WITH LONGEVITY

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According to models of successful aging, the maintenance of subjective well-being contributes to healthy longevity. We examined this proposal using longitudinal data from the AHEAD cohort (approximately 8000 in 1993, age 70 – 104). In 2006, approximately 34% survived and 18% were aged 90 to 105 (fewer expected in the to-be-released 2008 wave). Participants were interviewed at 2-year intervals (potentially eight occasions). We applied dual trajectory finite mixture modeling (Nagin, 2005) to examine differential trajectories of status change in self-reported depressive (psychosomatic) symptoms and positive well-being prior to death and among the survivors. In addition, we examined the psychosocial profiles (personality, loneliness, life satisfaction, aging satisfaction) of the survivors obtained in 2006 and 2008. Initial analyses reveal multiple trajectory groups differentiated by status level and pattern variability over time. The long-term survivors of the 1993 septuagenarians, octogenarians, and nonagenarians experienced extra years of life quality in advanced old age.

POST-HOSPITALIZATION HIP FRACTURE AND STROKE RISK: FINDINGS FROM THE HEALTH AND RETIREMENT STUDY

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Hospitalization for elders may have both positive and adverse effects on health. We determined the occurrence of and risk factors for hip frac-

ture and stroke in the AHEAD cohort of HRS, 5,511 persons >69 years and not in Medicare managed care, from 1993-2005. Baseline risk factors included socio-demographic and geographic status, health behaviors, disease history, functional status and cognitive performance. In the post-hospital period, hip fracture incidence rates increased over two-fold, and were highest in the oldest old. Similarly, the post-hospital period saw a trebling of stroke risk. Many of the risk factors for hip fracture and stroke were similar to those described in general for these conditions. We conclude that the risk of hip fracture and stroke after hospitalizations for reasons other than these conditions is substantially increased. Enhanced discharge planning and home care interventions may substantially reduce this excess occurrence.

EFFECTS OF DISEASES ON FUNCTIONAL CHANGE AMONG THE AHEAD COHORT

D. Alley⁴, E. Crimmins¹, B.J. Soldo³, D. Weir², M. Ofstedal², 1. *University of Southern California, Los Angeles, California*, 2. *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*, 3. *University of Pennsylvania, Philadelphia, Pennsylvania*, 4. *University of Maryland, College Park, Maryland*

The purpose of this paper was to develop growth curve models of functional decline and to estimate the effect of changing disease status on functional trajectories in the AHEAD cohort of the HRS. Functioning is measured using 8 Nagi-Breslow measures. Mixed-effects models (also called growth curve models and multilevel models) were used to examine the relationship between increasing age, presence and onset of chronic disease, and functional change. Models assumed a Poisson distribution because of the count nature of the dependent variable. Results suggest important group differences in the process of functional decline with age. Women and those with lower socioeconomic status have higher levels of functional difficulties at every age. All diseases examined were associated with higher levels of functional difficulty, although not all were associated with the rate of functional decline. The conditions associated with the greatest level of limitations were arthritis, stroke, and lung disease.

TRACING PARENTAL RESOURCE FLOWS TO/FROM INDIVIDUAL OFFSPRING: STABLE OR DYNAMIC?

B.J. Soldo¹, J. Henretta², 1. *University of Pennsylvania, Philadelphia, Pennsylvania*, 2. *University of Florida, Gainesville, Florida*

Since 1993, AHEAD respondents have been actively followed biennially. At each wave, elderly parents provide detailed data on the socio-demographic traits of each child and their individual transfers to and from each child. This paper reconstructs the flow of in-kind and financial transfers between the parent and each child individually. Our goal is to estimate stability over time in donor-recipient dyads and examine how family context, mother's characteristics, and child's characteristics produce stability or change in the exchange patterns. We estimate two-level multi-level models, using the multiple waves of data to characterize the level of exchange stability (both in level and type of transfer) of each dyad. Most respondents aged 70+ are female and a majority are unmarried. In all observations across years 16.7 % of offspring provide some type of support to a parent and a much smaller proportion of parents give to a child.

SESSION 1830 (SYMPOSIUM)

SUPPORT FOR RURAL AGING: PAST, PRESENT AND FUTURE

Chair: A.L. Cohen, *Sociology and Gerontology, Miami University, Oxford, Ohio*

Discussant: G.D. Rowles, *University of Kentucky, Lexington, Kentucky*

The rural areas of the United States are rich with history, culture and traditions that nurture natural support networks. Such areas also present multiple challenges to aging in place including geographic and social isolation, a dearth of healthcare providers and facilities and a lack

of transportation options. As the number of rural elders increases, services, supports and social ties needed to age in place successfully will likewise increase presenting both opportunities and challenges for older adults, families, and service providers. This symposium will examine how older adults age in place in rural areas through connections with their communities as well as social, healthcare, and personal care supports. In order to best understand the future impact of aging on rural America it is essential to understand the historical context of rural aging alongside current trends. Therefore this symposium will provide a temporal lens on rural aging that includes a retrospective look at research on the configuration of supports received by rural older adults in the past, interpretation through the lens of what we know today, and a prospective view of what is to come. Topics presented provide an opportunity to look at the past, present, and future of aging in rural areas for specific populations of older women, informal caregivers, paraprofessional caregivers, and rural native Alaskans. Special consideration will be given to the evolving interrelationship of formal (paid) and informal (unpaid) caregiving and social support networks in rural areas.

SUCCESSFUL AGING THROUGH THE EYES OF ALASKA NATIVES: THE HEALTH AND WELLBEING OF ALASKA NATIVE ELDERLY IN BRISTOL BAY, AK

J. Lewis, *Psychology, University of Alaska Fairbanks, Fairbanks, Alaska*

There is very little research on Alaska Native elders and how they subjectively define a successful older age. The lack of a minority definition risks portraying them as aging less successful than their non-minority counterparts. This research explores the concept of successful aging from an Alaska Native perspective and what it means to age well in Alaska. The Explanatory Model (EM) was used to gain a sense of the cultural beliefs about aging from Alaska Native elders in Bristol Bay. Research findings indicate that a set of cultural beliefs exist about successful aging, health status is related to successful aging, passing down knowledge is critical to becoming an elder, and aging successfully is based on personal responsibility and cognitions. Most elders stated that reaching a certain age (e.g. 65) does not determine their status as an elder, but rather the wisdom and experiences they gain throughout life.

CARE WORK IN RURAL AMERICA: OUT-OF-POCKET AND OPPORTUNITY COSTS OF RURAL CAREGIVERS

D. Wagner, *Gerontology, Towson University, Towson, Maryland*

This paper focuses on the spending and opportunity costs incurred by rural caregivers who participated in a survey and cost diary study conducted in late 2007. The study included caregivers across the country including urban and rural areas. This paper examines the strategies for managing informal care, the spending associated with this care and the opportunity costs of the care by rural caregivers. Diarists in the study spent an average of \$1,200 per month on caregiving expenses for the care recipient; medical supplies and costs were the most commonly reported cost category. Rural caregivers face not only geographic challenges in the support available to them, but financial challenges as well. The research revealed that those with the lowest income had both the highest levels of time spent on care and the highest proportion of income spent on care. Key findings and the implications for policy and practice are highlighted in the paper.

SOMEONE TO LEND A HELPING HAND REVISITED: WOMEN GROWING OLD IN RURAL MINNESOTA

D. Shenk, *Anthropology, University of North Carolina Charlotte, Charlotte, North Carolina*

This paper will revisit the findings from the Older Rural Women's Project which studied the social support systems of older women living in rural Central Minnesota in 1986-1987 with a follow-up in 1990. We will reconsider the findings through a new lens of the current emphasis on "aging in place." The focus is on the systems of exchange and support through which the 30 participants met their increasing needs

based on societal rules and values that govern a lifetime of social exchange. The women were participants and active manipulators of social support systems through which they met their needs and the needs of others in their networks while striving to remain independent and self-reliant. We will assess shifting cultural values based on traditional rural values and their implications for meeting the needs of rural elders through informal and formal systems of support.

THE CHALLENGES FACED BY PERSONAL SUPPORT SPECIALISTS PROVIDING HOME CARE IN A RURAL STATE

S. Butler, A. Ashley, *University of Maine/School of Social Work, Orono, Maine*

The paraprofessional workforce has been described as the centerpiece of our long-term care system (Stone & Weiner, 2001). But even in these difficult economic times of high unemployment, recruitment and retention of direct care workers remains challenging. This paper reports on a statewide study in Maine regarding work experiences of Personal Support Specialists in home care (n=260). Survey respondents reported a mean wage of \$9.05/hour and erratic part-time hours (mean=17.9/week). Reflecting the particular challenges of home care in a very rural state, un-reimbursed mileage averaged 44.4 miles/week; in the most rural regions, un-reimbursed mileage was significantly greater ($t = -2.70, p < .01$) than elsewhere. Themes from the rich narrative data included by 133 respondents (51% of sample) reiterated these challenges. This paper will review the particular burdens faced by rural home care workers and potential solutions to the problem of turnover including mileage reimbursement, guaranteed hours and livable wages.

SESSION 1835 (SYMPOSIUM)

USING GLOBAL PERSPECTIVES ON HEALTH AND SOCIAL RELATIONS TO INFORM CREATIVE APPROACHES TO AGING

Chair: H. Akiyama, *University of Tokyo, Tokyo, Japan, Institute for Social Research, University of Michigan, Ann Arbor, Michigan*
Discussant: T. Antonucci, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

We utilize four studies from different countries to examine cultural differences (and similarities) between Health and Social Relations. These studies are drawn from two developing countries, Mexico and Lebanon, and two developed countries, Japan and the U.S. Studies comparing older people in Okinawa (Japan) and Oregon (U.S.) indicate that the total frequency of social interactions is quite similar in both countries (although face-to-face contact and proximity of kin is greater in Japan), with Social Relations associated with lower levels of MCI. In both Mexico and Lebanon family relations are highly valued, central, and most people's expected source of support in old age. In Mexico, positive aspects of relationships both interact and increase with age. More proximal networks are associated with better health. In Lebanon, older people report positive support from family is experienced as anticipating their needs while negative support is experienced as 'too much talk'. Social Relations are significantly associated with circulation problems. And finally, applying the concept of Social Relations and Health to the specific disease of diabetes, examination of ethnic/racial subgroups, African Americans and American Indians report higher levels of self-care while Asian Americans report the lowest levels. However, with increased social support, Asian Americans significantly increase their self care suggesting that positive support is a potential mechanism for improving health. In sum, these papers provide a global perspective on how social relations might uniquely and creatively influence health in old age.

EXPLORING THE PROS AND CONS OF FAMILY SUPPORT: THE CASE OF LEBANON

K. Ajrouch, 1. *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*, 2. *Eastern Michigan University, Ypsilanti, Michigan*

No one issue better captures the challenges associated with aging and well-being in Lebanon than family relations. Lacking universal government programs for the aged, family is the main source of support for elders. This paper examines the meanings attributed to close social relations, the distribution of positive and negative support with key family members, and the link those relations have to health. Data are drawn from a mixed-method pilot study with 25 elders aged 51-86. Meanings of positive support include the ability to anticipate needs; meanings of negative support include "too much talk." Descriptive results of survey data reveal that 68% (17) of elders report at least one chronic illness. In addition, while spousal support is not correlated with health, perceiving sibling and child relationship as demanding is correlated with blood circulation problems. Together, these data provide important preliminary insights into the pros and cons of family support in Lebanon.

SOCIAL NETWORKS, AGE, AND HEALTH IN MEXICO

T. Antonucci, H. Fuller-Iglesias, *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*

Traditional Mexican culture emphasizes living in close contact with immediate and extended family, yet little is understood about how these cultural values influence the aging process. This study examines changes in the makeup of social support networks between midlife and old age and the ensuing effect on the aging process. Adults ages 45-99 (N=626) were selected from the Survey of Social Relations and Well-being in Mexico (Fuller-Iglesias & Antonucci, 2009). Correlations indicated that network size, frequency of contact with network, proximity with network, and proportion family in network were positively related to age. Regression analyses revealed significant interactions indicating that with increased age: frequency of contact and greater proportion family in network were related to greater life satisfaction; and increased proximity with network members was related to greater self-rated health. Findings will be discussed in light of cultural implications and creative applications of social relationships for promoting healthy aging in Mexico.

SOCIAL SUPPORT AS A POTENTIAL RESOURCE TO FACILITATE INCREASED DIABETES SELF-CARE AMONG OLDER ADULTS

N.J. Webster, G. Deimling, *Case Western Reserve University, Cleveland, Ohio*

Diabetes, an unfolding epidemic most common among older adults and 1.5 to 2.2 times more prevalent among racial/ethnic minorities can lead to other health complications when untreated. Social support is one resource that may increase diabetes self-care (checking blood sugar and feet for sores, and receiving annual eye exams) and subsequently prevent or delay complications. Using a U.S. national sample of adults aged 40-99 collected by the CDC in 2007 (N=28,138), this paper examines how frequency of diabetes self-care varies by race/ethnicity, and how self-care relates to level of social support. African-Americans and American Indians reported engaging in diabetes self-care most often, while Asian-Americans reported the lowest frequency. Among Asian-Americans, despite the lowest frequency, there was the strongest positive relationship ($r=.15$, $p<.001$) between social support and self-care compared to other racial/ethnic groups. Findings suggest social relations play a vital role in fostering self-care among racial/ethnic groups with the greatest need.

SOCIAL INTERACTION AS A POTENTIAL KEY TO OPTIMAL COGNITIVE AGING: OKINAWA-OREGON COMPARATIVE STUDY OF SUCCESSFUL AGING

H. Dodge^{1,2,3}, Y. Katsumata³, H. Todoriki³, D. Willcox⁴, M.J. Leahy⁵, Y. Michael¹, J. Kaye¹, 1. *Oregon Health & Science University, Portland, Oregon*, 2. *University of Michigan, Ann Arbor, Michigan*, 3. *Ryukyus University, Okinawa, Japan*, 4. *Okinawa International University, Okinawa, Japan*, 5. *Sky Lakes Medical Center, Klamath Falls, Oregon*

Past epidemiological studies have demonstrated that social relations have protective effects against the incidence of cognitive decline. The elderly in Okinawa, the most southern island prefecture of Japan, are known for long life expectancy and survive with better physical and cognitive health. One potential factor contributing to their health, as suggested by qualitative research, is observed high levels of social interaction. However, little quantitative and comparative research has been carried out. Therefore, we examined the levels of social interaction among Okinawan and Oregonian non-demented elderly aged 85 and older and whether the levels of social interaction are associated with cognitive well-being. Contact frequency with kin and non-kin members were similar between the two cohorts, although the Okinawan elderly had more face-to-face contacts with, and closer physical proximity to kin. Among the Okinawan elderly, mild cognitive impairment defined as CDR=0.5 (Clinical Dementia Rating) was associated with lower frequency of social interactions.

SESSION 1840 (SYMPOSIUM)

CHANGES AND ADAPTATIONS RELATED TO FUNCTION BEYOND AAGE 80: INSIGHTS FROM THE CHS ALL STARS STUDY

Chair: A.B. Newman, *Epidemiology and Division of Geriatric Medicine, University of Pittsburgh, Graduate School of Public Health and School of Medicine, Pittsburgh, Pennsylvania*

Discussant: J.D. Walston, *Johns Hopkins University School of Medicine, Baltimore, Maryland*

The CHS All Stars is a cohort study of successful aging to very old age, based on a follow-up of the surviving CHS cohort, aged 80-100+ in 2005-06. The study is designed to characterize individual and joint pathways leading to positive health outcomes. Functional aging was defined as no difficulty with ADLs and modified mini mental state exam score >80. Function was also assessed with longitudinal performance measures: gait speed, grip strength and digit symbol score. Of 5333 CHS participants alive in 1992-93, 60% had died, 30% were reenrolled in CHS All Stars. Of these, 53% were functionally intact. Age-related biological factors were assessed over time as potential correlates of functional aging and survival, including markers of metabolic, immune and hormonal function. In this symposium, we review recent findings that illustrate expected as well as paradoxical associations. Higher levels of adiponectin, an adipocytokine related to insulin sensitivity should characterize functional aging, yet does not behave as expected in late life. Insulin-like growth factor, reflecting in part the decline in growth hormone with age, shows non-linear effects. This longitudinal approach might explain previous reports from cross-sectional studies. The inflammation pathway is perhaps most robust in relationship to poor function and survival and tracks with grip strength and gait speed. Dihydroepiandrosterone (DHEAS) falls dramatically across the full spectrum of age. We examined the utility in using decline to predict short term mortality. These approaches may prove to be useful to characterize optimal aging trajectories underlying retained function in very old age.

ARE ASSOCIATIONS OF ADIPONECTIN WITH HEALTH IN OLD AGE ADAPTIVE?

J.R. Kizer¹, A. Arnold², E.S. Strotmeyer³, M. Cushman^{4,5}, S. Kritchevsky⁶, P.H. Chaves⁷, C. Hirsch⁸, A.B. Newman^{3,9}, 1. *Weill Cornell Medical Center, Cornell University, New York*, 2. *Collaborative Health Studies Coordinating Center, University of Washington, Seattle, Washington*, 3. *University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*, 4. *Department of Pathology, University of Vermont College of Medicine, Burlington, Vermont*, 5. *Department of Medicine, University of Vermont College of Medicine, Burlington, Vermont*, 6. *Wake Forest University Health Sciences, Winston-Salem, North Carolina*, 7. *Johns Hopkins University, Baltimore, Maryland*, 8. *University of California, Davis, Sacramento, California*, 9. *University of Pittsburgh, School of Medicine, Division of Geriatric Medicine, Pittsburgh, Pennsylvania*

Adiponectin is inversely related to insulin resistance and inflammation, but is associated with a paradoxical increase in mortality in older individuals. Whether higher adiponectin in older adults represents a survivorship bias or signals adverse aging-related processes is unclear. We examined correlates of 9-year longitudinal change in adiponectin among initially healthy All-Stars participants, and tested the hypothesis that higher adiponectin portends functional deterioration. Adiponectin increased more in men than women. Although baseline glucose, CRP, and BMI were inversely related to baseline adiponectin, they were positively correlated with interval increase. Neither baseline nor change in adiponectin was significantly associated with overall functional decline. In women, adiponectin did show a significant U-shaped relationship with incident ADL decline, yet linearly predicted greater mobility impairment and, in both sexes, steepening decline in DSST. These findings highlight the complex relations of adiponectin in older adults, some of which could reflect an adaptive response to age-related deterioration.

GREATER DHEAS CHANGE IS ASSOCIATED WITH HIGHER INCIDENT MORTALITY IN VERY OLD ADULTS

J. Sanders¹, A. Arnold², A.R. Cappola³, P.H. Chaves⁴, J. Robbins⁵, M. Cushman⁶, R. Boudreau¹, A.B. Newman¹, 1. *University of Pittsburgh, Pittsburgh, Pennsylvania*, 2. *University of Washington, Seattle, Washington*, 3. *University of Pennsylvania, Philadelphia, Pennsylvania*, 4. *Johns Hopkins University, Baltimore, Maryland*, 5. *University of California Davis, Sacramento, California*, 6. *University of Vermont, Burlington, Vermont*

We measured DHEAS in 1996-97 and 2005-06 in the Cardiovascular Health Study All Stars study [N=989, mean (SD) age 85.2 (3.6) years in 2005-06] and incident mortality through December 31, 2008. Using Cox proportional hazards regression adjusted for age, a significant drop in DHEAS level (more than -0.335 ug/ml in women and -0.582 ug/ml in men) was associated with increased risk of mortality in men and women (HR=1.78, 95% CI 1.16-2.73). Risk was attenuated in women after adjustment for baseline (1.60, 0.82-3.12) but not final (1.88, 1.23-2.89) level. Risk remained elevated in men after adjustment for baseline (3.76, 1.73-8.17) or final values (1.88, 1.23-2.89). In men, higher levels of DHEAS at baseline or follow-up were associated with ~35% mortality risk reduction for each 0.48ug/ml higher value. Results were similar after adjustment for cardiovascular disease. Declining DHEAS predicted short term mortality in very late life in this cohort.

DOES IL-6 TRACK WITH FUNCTIONAL DECLINE?

E.S. Strotmeyer¹, N.S. Jenny², B. French³, A. Arnold⁴, M. Cushman², P.H. Chaves⁵, S. Kritchevsky⁶, A.B. Newman^{1,7}, 1. *Epidemiology, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, Pennsylvania*, 2. *University of Vermont, Burlington, Vermont*, 3. *University of Pennsylvania, Philadelphia, Pennsylvania*, 4. *University of Washington, Seattle, Washington*, 5. *Johns Hopkins University, Baltimore, Maryland*, 6. *Wake Forest University Health Sciences, Winston-Salem, North Carolina*, 7. *University of Pittsburgh, School of Medicine, Division of Geriatric Medicine, Pittsburgh, Pennsylvania*

Elevated inflammation markers are associated with death and disability in older adults, thus might track with longitudinal decline in physical function. In 1039 men and women aged 80-100+ in the CHS All Stars cohort, we examined concurrent changes in grip strength and gait speed in association with CRP and IL-6 changes over 9 years. Models were adjusted for age, sex, smoking, BMI, cardiovascular risk factors and baseline values of CRP or IL-6. Each doubling in CRP was associated with -0.30 (95%CI: -0.52, -0.08) decline in grip strength and for IL-6 doubling, -1.00 (95%CI: -1.39, -0.61). Results were similar for gait speed decline. For incident physical function impairment, ORs for IL-6 or CRP doubling were 1.26 (1.02, 1.56) and 1.15 (1.01, 1.29), respectively. IL-6 change was more strongly related to functional decline than CRP change suggesting that IL-6 could be useful in tracking functional decline in older adults.

TRAJECTORIES OF IGF-1 AND MORTALITY

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Disruption of IGF-I pathways increases lifespan in animal models, though this has not been confirmed in humans. We examined the relationship of IGF-I trajectory patterns with survival in 945 participants aged 65+ enrolled in the Cardiovascular Health Study who had IGF-I levels measured at 3-6 timepoints and vital status assessment over 16 years. Declining or increasing slope of IGF-1 level, increasing variability, and lower IGF-I levels were each associated with greater mortality (all p<0.001). In adjusted models including all three trajectory parameters (slope, variability and baseline IGF-I), a steep decline or increase and variability of 10% or greater independently predicted mortality, whereas only very low IGF-I levels remained predictive of mortality. In contrast to data from animal models, low IGF-I levels are associated with decreased survival in older humans. Irrespective of the actual level, older individuals with stability of IGF-I levels have lower mortality than those with whose levels fluctuate.

SESSION 1845 (POSTER)

CHRONIC DISEASE EPIDEMIOLOGY

DEPRESSIVE SYMPTOMS AND HEART RATE VARIABILITY IN COMMUNITY-DWELLING OLDER WOMEN

A.Z. Moore¹, P.H. Chaves², 1. *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*, 2. *Johns Hopkins Division of Geriatric Medicine and Gerontology, Baltimore, Maryland*

Associations between depression and cardiovascular disease outcomes have been observed in older adults. It has been hypothesized that autonomic dysregulation may be a mechanism through which depression is linked to cardiovascular disease. The relationship between depression and autonomic function has not been well characterized in older women. This project explores the relationship between prevalent depres-

sive symptoms as measured by the Geriatric Depression Scale (GDS) and heart rate variability (HRV) as classified by time and frequency domain indices as well as a nonlinear index, approximate entropy (ApEn), in cross sectional pilot data from a group of moderately to severely disabled older women. The data represent a subset of Women's Health and Aging Study I (Baltimore, MD) participants, $n = 296$. The prevalence of depressive symptoms ($GDS > 10$) in this sample was 24.7%. In crude logistic regression models and models adjusted for age, non-white race, CVD, diabetes, MMSE < 24 , smoking status, and use of beta blockers, heterogeneity in the odds ratio for lowest HRV tertile was observed across indices. There was agreement in the direction of association among several measures. The ApEn models exemplify this trend: the crude odds ratio for low ApEn comparing $GDS > 10$ to $GDS \leq 10$ was 1.82; (95% CI: 1.05, 3.13), the fully adjusted odds ratio was 1.61; (95% CI: 0.90, 2.90). These results support a hypothesized positive association between depression burden and autonomic dysregulation in older women. Further validation of this relationship and examination of the clinical relevance of HRV in the context of depression is warranted.

ASSOCIATION OF PARENTAL HISTORY OF HYPERTENSION, AGE AND BODY MASS INDEX (BMI) WITH INCIDENT HYPERTENSION IN CHINESE

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Little is known about the influence of parental history of hypertension on incident hypertension among the Chinese. We hypothesized that individuals who reported a positive parental history of hypertension would be more susceptible to the effects of BMI, and that this association would vary with age. To address this research question, data from the Peoples' Republic of China Study were considered. Participants included 1,992 males and 2,194 females aged 24-71 years from Guangzhou, China. Baseline information was collected in 1983-84 and follow-up examinations were in 1987-88 and 1993-94. Anthropometrics were measured and parental history of hypertension was obtained from self-report questionnaires. Logistic regression models (SAS 9.1) suggest that a positive parental history of hypertension, age and larger body mass index, independently increased the risk of incident hypertension. There was no effect modification of parental history by age or BMI. For each of the main effects, the odds ratios (95% CI) for incident hypertension were 1.16 (1.11, 1.22), 1.09 (1.07, 1.10) and 1.42 (1.09, 1.86) for a one unit increase in BMI, a one year increase in age and positive parental history of hypertension, respectively, when controlling for sex, exercise, alcohol, smoking and region. In stratified models, the odds ratios for BMI and for age were almost identical between subjects with a positive and negative parental history of hypertension. These results suggest that a positive parental history of hypertension increased the risk of hypertension incidence but did not modify the association of age or BMI with incident hypertension in Chinese.

COMMON CAROTID ARTERY ADVENTITIAL & LUMEN DIAMETER CHANGES WITH PHYSICAL ACTIVITY IN OLDER ADULTS: LIFE RANDOMIZED PILOT STUDY

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The objective was to determine 6 month change in subclinical cardiovascular disease measures after physical activity or education only intervention in older adults in the Lifestyle Interventions and Independence for Elders (LIFE) randomized pilot study. We used 38 men and women with complete baseline and follow-up pulse wave velocity (PWV), common carotid artery intima media thickness (IMT), adventitial diameter (AD) and lumen diameter (LD). Participants were 70-85 years, able to walk, sedentary, free of severe health problems and ran-

domized to moderate Physical Activity (PA) or Successful Aging (SA) health education. T-tests, Wilcoxon tests, and General Linear Modeling were used to assess differences between groups and changes between baseline and follow-up measures. Participant average age was 77; they were predominately Caucasian (84%), female (74%), current non-smokers (100%), not diabetic (82%), and had a history of hypertension (55%). Average baseline PWV was 1199cm/s, IMT was 1.00mm, AD was 8.00mm and LD was 6.01mm; no differences between groups were observed. There were no differences between mean change of PWV (SA: -237cm/s, PA: -85cm/s) or IMT between groups. Mean AD (0.12mm) and LD (0.15mm) increased in the PA group and decreased in the SA group (AD: -0.13mm, LD: -0.11mm, both $p < 0.01$). Significant changes in AD and LD may reflect vascular remodeling processes that accompany physical activity. Although not statistically significant the change in PWV was clinically relevant. It is necessary to replicate these measures in a larger sample to better understand the effects of physical activity on vascular health in older adults.

ROPINIROLE PROLONGED RELEASE REDUCES NOCTURNAL SYMPTOMS IN PATIENTS WITH PARKINSON'S DISEASE

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Objective: Assess the effect of ropinirole prolonged release on nocturnal symptoms in patients with advanced Parkinson's disease (PD) not optimally controlled with L-dopa. **Methods:** In a Phase III, 24-week, efficacy and safety study, patients were randomized to receive adjunctive once-daily ropinirole prolonged release (2-24 mg/day), or placebo (EASE-PD Adjunct [101468/169]). Nocturnal symptoms were assessed retrospectively for sleep dysfunction in all patients by change from baseline Parkinson's Disease Sleep Scale (PDSS) total score (range=0-150; ≤ 100 =sleep dysfunction). **Results:** Baseline PDSS score was ≤ 100 for 94/200 (47%) patients receiving ropinirole prolonged release vs 90/190 (47%) patients receiving placebo. Ropinirole prolonged release demonstrated a treatment benefit over placebo for patients with baseline PDSS score ≤ 100 ; mean (SD) increases from baseline PDSS score were: Week 12 observed case (OC), 14.2 (22.88) vs 2.8 (17.60); Week 24 OC, 11.3 (25.58) vs 4.0 (20.62); Week 24 last observation carried forward (LOCF), 10.3 (24.44) vs 2.5 (20.96) (ropinirole prolonged release $p \leq 0.0003$ vs baseline). Patients with baseline PDSS score > 100 showed similar changes whether treated with ropinirole prolonged release or placebo at Week 12 OC, -2.6 (16.95) vs -5.1 (16.73); Week 24 OC, -5.7 (21.46) vs -5.3 (13.03); Week 24 LOCF, -5.3 (20.31) vs -6.4 (13.62), respectively. **Conclusions:** Ropinirole prolonged release improves nocturnal symptoms in patients with advanced PD displaying significant sleep dysfunction as measured using the PDSS. **Study supported by:** GlaxoSmithKline R&D, SkyePharma.

ROPINIROLE PROLONGED RELEASE MAINTAINS A REDUCTION IN "OFF" TIME IN ADVANCED PARKINSON'S DISEASE

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Objective: Retrospectively evaluate maintenance of a clinically meaningful reduction in "off" time with ropinirole prolonged release in patients with advanced Parkinson's disease (PD) not optimally controlled with L-dopa. **Methods:** The Phase III, 24-week EASE-PD Adjunct Study (101468/169) randomized patients to adjunctive ropinirole prolonged release (2-24mg/day) or placebo. Primary endpoint:

mean change from baseline daily awake “off” time at Week 24 last observation carried forward (LOCF). Retrospective analyses assessed the proportion of patients with $\geq 20\%$ reduction from baseline in “off” time maintained to study endpoint and present for ≥ 2 consecutive visits. **Results:** Baseline mean awake “off” time was 7.0h in both groups. At Week 24LOCF, ropinirole prolonged release significantly reduced “off” time from baseline vs placebo (adjusted mean treatment difference [AMTD]: -1.7h ; 95%CI: $-2.3, -1.1$; $p < 0.0001$). At Week 2 observed case, more patients achieved $\geq 20\%$ maintained reduction in “off” time with ropinirole prolonged release (35/197[18%]) than placebo (13/189[7%]) and significantly more patients achieved this maintained reduction with ropinirole prolonged release (104/201[52%]) than placebo (45/190[24%]) at Week 24LOCF (adjusted odds ratio: 3.52; 95%CI: 2.27, 5.47; $p < 0.001$). At Week 24LOCF, mean (SD) dose of ropinirole prolonged release was 18.8(6.3)mg/day. Adjusted mean L-dopa dose reductions were: ropinirole prolonged release, -242 and placebo, -137mg/day (AMTD: -105mg/day ; 95%CI: $-137.8, -73.0$; $p < 0.0001$). **Conclusions:** Ropinirole prolonged release can offer patients with advanced PD a $\geq 20\%$ maintained reduction in “off” time as early as 2 weeks after treatment initiation, with 52% of patients achieving this clinically relevant benefit within 24 weeks. **Study supported by:** Glaxo-SmithKline R&D and SkyePharma.

MORTALITY RISK OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN OLDER PERSONS: A COMPARISON OF TWO STAGING STRATEGIES

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BACKGROUND: The Global Initiative for Obstructive Lung Disease (GOLD), the current standard, stages the severity of chronic obstructive pulmonary disease (COPD) based on the forced expiratory volume in 1-second (FEV1), expressed as percent predicted (%Pred). Among older persons, this approach has not been validated or compared with FEV1 staging based on standardized residual percentile (SR-tile). **OBJECTIVE:** To evaluate the association between GOLD staging, relative to SR-tile staging, and subsequent mortality among older persons with COPD. **METHODS:** We studied 2,480 persons, aged 65-80 years, from the Third National Health and Nutrition Examination Survey. COPD was defined by an FEV1/Forced Vital Capacity < 0.70 and staged according to GOLD and SR-tile cut-points. **RESULTS:** 831 (33.5%) had COPD and 868 (35.0%) had died over 12-years. Based on GOLD staging, mortality risk was elevated for FEV1 50-79%Pred and $< 50\%$ Pred, representing 388 (46.7%) participants with COPD: adjusted hazard ratios (HR) of 1.31 (1.08, 1.59) and 2.24 (1.65, 3.03), respectively. Based on SR-tile staging, mortality risk was elevated at an FEV1 $< 5\text{th}$ SR-tile, representing 179 (21.5%) participants with COPD: adjusted HR of 2.01 (1.60, 2.54). Among the 314 participants who had an FEV1 50-79%Pred, mortality risk was elevated only in the 105 (33.4%) who also had an FEV1 $< 5\text{th}$ SR-tile. **CONCLUSION:** GOLD staging, relative to SR-tile staging, substantially overestimates the number of older persons with COPD who are at increased risk of death. If confirmed in other populations of older persons, the SR-tile approach may improve the staging of COPD severity by more accurately classifying mortality risk.

LOW BLOOD PRESSURE AND PRESERVED SYSTOLIC FUNCTION ALTERS PROGNOSIS IN ELDERLY WITH HEART FAILURE

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Aim: The purpose of the review of this literature is to evaluate the relationship of systolic blood pressure and preserved systolic function (PSF) on morbidity and mortality in elders with heart failure (HF). **Background:** Although existing research has advanced the body of knowledge for care and management of heart failure, treatment largely focuses on reducing blood pressure and fluid management to optimize deteriorated

systolic function. Understanding how differently elders respond to existing guideline treatments, when they have largely been excluded from clinical trials, remains relatively unexplored. **Method:** search of PubMed and CINAHL databases was conducted to review literature from 2006 to 2009. The question guiding the literature review was: Are we going too low managing blood pressure when treating elders with heart failure? **Findings:** Emerging research reveals low blood pressure is a risk factor for adverse outcomes in elders with HF. Elder participants with PSF experience similar mortality rates as counterparts with deteriorated systolic function. Participants with PSF are predominantly older females and are less likely to receive cardiology consultation for optimization of care. Pharmacologic interventions of β -blockers and angiotensin-converting enzyme inhibitors improve outcomes in elders with HF, most significantly with systolic blood pressures $< 110\text{mmHg}$, despite vasodilatory effects. **Conclusions:** A more comprehensive approach to the specific needs of HF elders with low blood pressure and PSF is associated with decreases in hospitalization and mortality. Guidelines specific to managing elders with HF and PSF requires further investigation. **KEYWORDS** heart failure, prognosis, preserved systolic function, blood pressure, elders

SESSION 1850 (POSTER)

FRAILTY AND OSTEOPOROSIS

PROGNOSTIC IMPACT OF PRE-OPERATIVE ALBUMIN ON IN-HOSPITAL MORTALITY AND COMPLICATIONS AFTER HIP FRACTURE

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Low serum albumin may have prognostic value for morbidity and mortality after hip fracture. The primary aim was to evaluate the independent association between low serum albumin ($< 35\text{ g/L}$) at hospital admission and short term (in-hospital) mortality/ post-operative complications of patients with hip fracture. **METHODS:** A review of a prospective population-based cohort of 583 hip fracture patients who had pre-operative serum albumin values measured at hospital admission. Patients who were 65 years or older and admitted with a primary diagnosis of hip fracture to a large urban health region (3 tertiary hospitals) were included. In-hospital mortality and post-operative complications were obtained from chart review. **RESULTS:** Mean age was 82 (SD 7) yrs and 71% were female. Mean serum albumin was 33.8 (SD 4.5) g/L; overall 55% ($n=318$) of patients had low albumin. In-hospital mortality was 46 (8%) and rate of non-fatal postoperative complication rate was 31 per 100. Only the presence of chronic obstructive pulmonary disease (COPD), and cancer were independently associated with low albumin levels. Mortality was 11% ($n=35$) among those with low albumin levels and 4% ($n=11$) for those with normal values (unadjusted odds ratio (OR) 2.86, 95%CI 1.42, 5.74). After multivariate adjustment, the association between low serum albumin and mortality remained statistically significant (adjusted OR 2.4, 95%CI 1.2, 5.1). Low albumin levels were also significantly associated with postoperative complications (adjusted OR 1.87 95%CI 1.27, 2.76). **CONCLUSIONS:** Routine measurement of serum albumin is warranted in this frail population because it seems to have “value-added” in terms of providing prognostic information.

OSTEOPOROSIS AND FRAILTY STATUS IN ELDERLY PEOPLE WITH CARDIOVASCULAR DISEASES. PRELIMINARY RESULTS FROM FRAILTY IN ELDERLY OUTPATIENTS WITH CARDIOVASCULAR DISEASE STUDY-FRAGICORS

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Aim: The goal of this study was to examine the impact of osteoporosis on frailty status in elderly outpatients with cardiovascular diseases. **Subjects and Methods:** cross sectional analysis of data from FRAGICORS an observational study of the epidemiology of frailty status and disability in 280 men and women who were 65 years old or more with cardiovascular disease from ambulatories of Federal University of São Paulo, Brazil, for 3 years. The analytic sample for this study included patients who underwent DEXA analysis in the last year. Frailty was considered prevalent if subjects had 3 or more of the following 5 criteria: weight loss, weakness, slowness, low energy expenditure, and exhaustion. Osteoporosis was defined as a bone mineral density t-score below minus 2.5 SD in lumbar and/or proximal femur). **Results:** Until November 2008, 74 elderly men and women were included. Frail older people were older (mean age: 79.5 years; $p=0.04$), black (86.4%; $p<0.05$), women (86.4%; $p=0.02$), widowers (63.6%; $p=0.05$) and take more daily medications (mean 6.6; $p=0.002$) when compared to non frail (pre frail and robust). Twenty two (29.7%) were frail, 43(58.1%) pre frail and only 9(12.2%) were robust. In frail older people the prevalence of osteoporosis was 45.6% ($p=0.007$), hypertension 95.5% ($p=0.29$), heart failure was 72.7% ($p=0.06$) and cognitive decline was 45.5% ($p=0.30$). The likelihood of being frail was substantially higher in the presence of osteoporosis ($OR=6.25$ $CI_{95\%}:1.89-20.66$; $p=0.003$) **Conclusion:** Our study suggests a strong association between osteoporosis and frailty status in a sample of outpatients elderly people with cardiovascular diseases.

SESSION 1855 (PAPER)

GERIATRIC CLINICAL ISSUES II

SUNDOWN SYNDROME: A SCIENTIFIC UPDATE

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PURPOSE: Sundown Syndrome is defined in the literature as increased confusion and agitation occurring near sunset in the early evening. Little scientific research has been reported 1987 when Evans conducted a seminal study. The purpose of this scientific update is to search for new research on or related to Sundown Syndrome. **METHODS:** The terms Sundown Syndrome and nocturnal agitation were used to conduct a systematic review of the literature for scientific evidence. The following databases were used: PubMed, CINAHL, and ProQuest. Inclusion criteria were: English language, peer reviewed, and the year 1987 forward. Literature was also retrieved from secondary references from included studies and relevant sources. **RESULTS:** A total of 21 research articles, including Evan's 1987 study, were identified by the literature search. The literature linked increased confusion and agitation in the early evening to the following: Sundown Syndrome/Disruptive Behavior (13), Circadian Rhythm (6), Delirium (1), and Melatonin (1). **IMPLICATIONS:** We will discuss the antecedents and consequences that have been debated in the research of Sundown Syndrome in older adults and methods for increasing the understanding of the Sundown Syndrome label. The potential relationship to delirium and a future research agenda for Sundown Syndrome research will also be discussed.

EXAMINING MEDICINE ACCUMULATION AND DISPOSAL: DRUG PROFILES, INFLUENCING FACTORS AND POLICY IMPLICATIONS FOR OLDER ADULTS

J. Crittenden¹, L.W. Kaye¹, S. Gressitt², 1. *Center on Aging, University of Maine, Bangor, Maine*, 2. *Maine Office of Adult Mental Health, Augusta, Maine*

The accumulation of pharmaceuticals in the home is a growing trend throughout the country that poses health and safety risks for older adults and their families. In response, the Safe Medicine Disposal for ME Program was established to provide older adults and their families with the country's first consumer-focused pharmaceutical mailback program. The program, in its first two phases, distributed envelopes ($n = 9,390$) to older adults, caregivers, and families in all 16 counties in Maine via a network of 100 distribution sites. Program envelopes provide a means for community members to return their unused and unwanted medications for safe and proper disposal while providing the unprecedented opportunity for critical health policy and medicine accumulation research. Returns from the program indicate that the response rate for this program is approximately 25%. Of the over 800 pounds of medicines returned to date, 10% of the drugs collected represent controlled substances. Significant factors leading to residential accumulation include: death in the family, medicine expiration prior to full use, or the patient instructed by a healthcare provider to discontinue use. Data were collected via program participant surveys ($n = 900$), envelope tracking protocols ($n = 3000$), and medicine returns inventories (over 4000 individual drug entries). Updated data analysis to be presented includes the type, average wholesale prices of unused medicine, classification, response rate data and contributing factors; demographic profiles; and salient motivational factors for program participation controlling for age. Supported by US EPA Grant #CH-83336001-0.

PATTERNS OF TOOTH LOSS IN OLDER ADULTS WITH DEMENTIA UNDER CURRENT MODELS OF CARE

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Objective: While Older Adults with Dementia (OAD) experience more oral disease than non-demented elders, their tooth loss patterns remain unknown. This study's goal was to explore tooth loss patterns in OAD under current dental care models. **Methods:** 491 dentate elders, including 119 OAD, were retrospectively recruited. Subjects were treated and brought to stable oral health before enrollment. Dental treatment was equally provided for all subjects during follow-up. Baseline medical, functional, cognitive and dental assessments were abstracted from dental records to predict tooth loss. Propensity score matching was used to control for confounders. Cox, Poisson and negative-binomial regressions were developed to study tooth loss patterns for subjects with and without dementia. **Results:** Demented and non-demented subjects arrived with averages of 18 and 20 teeth, respectively. 27% of remaining teeth in the demented group were retained roots or decayed, higher than in the non-demented group ($P=0.0006$). Patterns of tooth loss did not significantly differ between the two groups. 11% of subjects in both groups lost teeth by 12 months' follow-up. By 48 months, 31% of non-demented subjects and 37% of demented subjects lost at least one tooth ($P=0.5$). In both groups, on average, 15% of people lost teeth per year. Mean numbers of teeth lost in 5 years were 1.21 for demented subjects and 1.01 for non-demented subjects ($P=0.89$). **Conclusion:** Dementia itself did not cause more tooth loss in OAD. While oral health was poor at arrival, demented subjects maintained their dentitions as well as non-demented subjects when dental treatment was provided.

PILOT STUDY OF COMPUTERIZED DECISION SUPPORT FOR DELIRIUM SUPERIMPOSED ON DEMENTIA IN OLDER ADULTS

D.M. Fick¹, M. Steis¹, L. Mion³, J.L. Walls⁴, S. Inouye², 1. *School of Nursing, The Pennsylvania State University, University Park, Pennsylvania*, 2. *Harvard Medical School, Boston, Massachusetts*, 3. *Vanderbilt University, Nashville, Tennessee*, 4. *Mount Nittany Medical Center, State College, Pennsylvania*

PURPOSE: Delirium occurs in over 40% of hospitalized older adults with dementia, substantially worsens outcomes in a population who are already burdened by functional decline, and costs over \$150 billion each year. The purpose of this pilot study was to test the feasibility, nurse adherence, and user satisfaction of the computerized decision support component of a multi-component intervention strategy called, Early Nurse Detection of Delirium Superimposed on Dementia (END DSD). The intervention is designed to improve both nurse assessment and detection of delirium and non-pharmacological management of DSD. **METHODS:** This pilot study enrolled and followed 15 consecutive admissions with dementia and their caregivers daily for the duration of their hospitalization and describes documentation and nurse adherence outcomes from 55 RNs and 7 LPNs at one Central PA acute care setting who used the delirium decision support screens integrated into the nursing portion of the electronic medical record (EMR). **RESULTS:** We found 100% adherence by nursing staff on the delirium assessment decision support screens and 75% adherence on the management screens. Fifty-five registered nurses (RNs) documented 196 times on the delirium screens across 96 hospital days. The pilot patients had a mean age of 83, and a mean admitting MMSE score of 14. Fourteen patients (14/15) showed an improvement in their MMSE scores at discharge. **IMPLICATIONS:** We will discuss the feasibility, the barriers and facilitators to use, the narrative data from the nurse documentation on mental status in the EMR, and the lessons learned for future research and practice.

SESSION 1860 (PAPER)

LONG TERM CARE - HS PAPER SESSION

LIFESTYLE, SOCIAL, AND MEDICAL PREDICTORS OF INSTITUTIONALIZATION: AUSTRALIAN LONGITUDINAL EVIDENCE

H. Kendig¹, C. Browning², Y. Wells³, S. Thomas², 1. *University of Sydney, Lidcombe, New South Wales, Australia*, 2. *School of Primary Health Care, Monash University, Notting Hill, Victoria, Australia*, 3. *Australian Institute for Primary Care, La Trobe University, Melbourne, Victoria, Australia*

Aims and Methods: This paper aims to identify lifestyle, social, and medical predictors of entry to residential aged care. The data are drawn from the Melbourne Longitudinal Studies on Healthy Ageing funded by the National Health and Medical Research Council, the Australian Research Council, and the Victorian Health Promotion Foundation. Baseline data were collected in a representative survey of 1000 people aged 65 years and over living in the community in 1994. Outcomes to 2006 were identified for 87% of respondents from biennial follow-ups with respondents or informants. Cox regression was used to identify how the likelihood of entry to residential care was predicted by a range of socioeconomic, health, and lifestyle factors at baseline. **Results:** Nearly half of the respondents, notwithstanding an average age of 74 years at baseline, remained in the community throughout later life and never entered residential care. Among the 50% who had died over the study period, only a third were known to have entered residential care. Baseline variables that significantly predicted entry to residential care – after controlling for all other factors – were relatively older age, IADL dependence, cognitive impairment, low or high BMI, and low social activity. For men only, number of medical conditions and healthy nutrition score also emerged as predictors. For women only, never having been mar-

ried, and low BMI, also were predictors. For men only, the risk of entry to residential aged care was determined mainly by disease burden whereas for women social vulnerability and functional capacities were more important.

ENRICHED CLINICAL LEARNING ENVIRONMENTS THROUGH PARTNERSHIPS (ECLEPS): A PATHWAY TO LONG TERM CARE

J.C. Cartwright¹, D. White³, J. Lottes³, R. Tadessa², J.M. Hagan², 1. *School of Nursing, Oregon Health & Science University, Ashland, Oregon*, 2. *Oregon Health & Science University, Portland, Oregon*, 3. *Portland State University, Portland, Oregon*

Long term care (LTC) nursing is complex and rewarding, requiring the very best in nursing skills, knowledge, and leadership. Yet few graduating nurses elect to pursue careers in LTC, in part, because of limited opportunities to learn in LTC settings. Faculty are often reluctant to use LTC because of concerns about available role models and the overall environment as a setting that promotes learning. LTC nurses desiring a role in student education report barriers of time and preparation for the role. ECLEPs is an academic-practice partnership designed to build capacity for LTC facilities to be excellent practice and learning sites. A course on chronic illness, mental health, and end-of-life care for mid-program students was chosen as the focus. Partnering with four LTC organizations (assisted living and nursing facilities), ECLEPs provided four days of training to 9 staff nurses that included information about the course, student learning activities, simulation laboratory learning, and the 2-day LEAP program (Mather Lifeways). Two student cohorts (n=21) have completed their clinical placements in one of these four facilities. Staff nurses and students reported positive experiences. Nurses felt supported by faculty, enjoyed working with students, and indicated a desire to continue as a clinical site. All students reported a positive educational experience, increased understanding of LTC, gerontologic nursing, and chronic illness, and respect for LTC nursing. Most would consider LTC nursing in their future, if not immediately after graduation. Several tools emerged from the project that can be used in replicating this approach to clinical education.

GEOGRAPHIC DIFFERENCES IN LONG-TERM HEALTH CARE SERVICES AMONG OLDER ADULTS

K.S. Clay, B. Kang, J. Lee, *School of Social Work, University of Georgia, Athens, Georgia*

Long-term health care for older adults has become an increasingly significant part of the health care system in the United States. However, there have been geographic variations in health service availability and service utilization. In addition, it is uncertain whether there are similar geographic variations in the rates of long-term health care utilization by older adults. This study used national data drawn from the Community Partnerships for Older Adults (CPOA) Program Survey of Older Adults. The study sample included community-dwelling older adults (n = 2,435, 64.3% women, 65.6% White) divided into five regions across the United States (Pacific, Northeast, Midwest, West, and South). Bivariate logistic regression and multivariate logistic regression were used for analysis. The majority (74.6%) of older adults reported that their community needed to do more to address their long-term health care needs despite the availability of many services in their community. Educational attainment and region were major factors influencing the knowledge of services (p < .05). Compared to other geographic regions, the South had significantly lower odds ratios for knowledge of health care services and using those services, as well as significantly lower odds ratios of having health care coverage (p < .05). Future study is needed to explore what causes these variations among regions across the United States. Additionally, advocating and advertising long-term health care services is important for community-dwelling older adults in the South.

REDUCING BELTS FROM NURSING HOMES: A PILOT STUDY

M. Gulpers^{1,2}, M. Bleijlevens¹, E. Van Rossum^{1,3}, J. Hamers¹, *1. Faculty of Health, Medicine and Life Sciences, School for Public Health and Primary Care: Caphri, Maastricht University, Maastricht, Netherlands, 2. Verpleeghuis Lückerreide (nursing home), MeanderGroep Zuid-Limburg, Kerkrade, Netherlands, 3. Research centre on Autonomy and Participation of chronically ill patients, Zuyd University, Heerlen, Netherlands*

Background: Several attempts have been made to reduce the use of physical restraints in nursing homes. Most studies used educational approaches and introduced a nurse specialist as a consultant. However, the success rate of these interventions has been inconsistent, and in some countries this intervention proved to be ineffective. Therefore we developed a new multi-component intervention ("EXBELT") that comprises the educational intervention for nursing home staff in combination with a policy change (belt use is prohibited by the nursing home management), availability of alternative interventions, and availability of a nurse specialist and nursing home director as consultants. **Methods:** "EXBELT" was introduced at 1 psychogeriatric ward (30 residents) in a Dutch nursing home. Resident characteristics (like cognitive status) and information regarding the use of physical restraints were collected at baseline, and after one, three and nine months follow-up. The use of physical restraints was measured using observations by blinded trained observers. **Results:** At baseline, belts were used in 12 residents. After 1 month follow-up, only 1 resident with a belt was left. This result was also found after 3 and 9 months follow-up. There was no significant increase in the number of falls, and the reduction of belts did not result in an increase the use of other physical restraints. **Conclusion:** The results of this pilot study are very promising. However, a limitation is that this study has been conducted on only 1 ward. Therefore "EXBELT" should be further developed and evaluated in a larger sample of psychogeriatric nursing home wards.

CONTINENCE AND SLEEP: NIGHTLIFE IN CARE HOMES FOR OLDER PEOPLE

I.A. Evers, S. Arber, *Faculty of Health and Medical Sciences, University of Surrey, Guildford, United Kingdom*

This research indicates that continence care is a key determinant of poor sleep in care homes for older people. The study is part of a four year New Dynamics of Ageing Collaborative Research Project (CRP), SomnIA (Sleep in Ageing), addressing practice and policy relevant issues arising from the nature, impact and management of the sleep-wake balance in later life. This is a complex cross-disciplinary research project, especially in light of the vulnerable group of older people living in care homes. In 10 care homes situated in England, quantitative and qualitative data were collated from 140 male and female residents aged 65 - 100. For a period of two weeks, diaries were maintained denoting sleep and activity of participants. To contextualise the environment in which they slept 240 hours of dawn, dusk and night observations and interviews with residents (n=40) and staff (n= 78) were conducted. Data establishes that continence care influences the daily routine in care homes and disturbed the participants' sleep. The physical, routine controls to check on an older person's continence are perceived as intrusive and influence their sleep pattern. The regular final check by night staff also brings an often premature end to a good night's sleep. There is a need to reconsider the implementation of best practice in continence care at night in order to improve care home residents' night time sleep. This research is supported by the New Dynamics of Ageing initiative, a multidisciplinary research programme funded by AHRC, BBSRC, EPSRC, ESRC and MRC (RES-339-25-0009)

SESSION 1865 (SYMPOSIUM)

PREPARING A HEALTH CARE WORKFORCE FOR AN AGING AMERICA: CHALLENGES AND COLLABORATIVE SOLUTIONS

Chair: *M. Gugliucci, Association for Gerontology in Higher Education, Washington, District of Columbia, University of New England College of Osteopathic Medicine, Biddeford, Maine, Eldercare Workforce Alliance, New York, New York*

The Institute of Medicine, in its vital report "Re-tooling for an Aging America: Building the Health Care Workforce," called for immediate investments in preparing our health care system to care for older Americans and their families. Those who care for older adults must have essential data, knowledge, and tools to provide high-quality health care. A 3-prong approach was proposed: (1) Enhance the geriatric competence of the entire workforce; (2) Increase recruitment and retention of geriatric specialists and caregivers; and (3) Improve the way care is delivered. This panel discussion will illuminate the issues and challenges of meeting the health workforce needs of our changing demographics, and describe a collaborative effort to enhance the preparation of students and professionals in health care. Representatives of the national Eldercare Workforce Alliance, which is working to propose practical solutions to strengthen our eldercare workforce and improve the quality of care, will frame the challenges and issues. Representatives of the AGHE Geriatric Curriculum Development Task Force will describe its interdisciplinary and organizational approach for constructing Geriatrics/Gerontology competencies and curricula guidelines for Health Professions Programs at every educational level. The AGHE Task Force is motivated by the increased demand for health care providers competent to provide health-promoting/self-empowering care for older adults, the general lack of explicit geriatric content across disciplines, and the lack of geriatric/gerontology guidelines for health care provider education programs. This presentation will invite health professions educators to become part of the enterprise to improve the health and wellness of our older adult population.

SESSION 1870 (SYMPOSIUM)

THE PROBABILITY AND CONSEQUENCES OF SLOWING THE AGING PROCESS IN HUMANS

Chair: *L. Hayflick, University of California, San Francisco, San Francisco, California*

Ever since the first recipe appeared 3500 years ago for stopping or slowing human aging and the hundreds of thousands of additional instructions for doing so that followed, - none have succeeded. Impressed with the astounding scientific advances made during the last century, some scientists insist that we are on the verge of success. A few of this symposium's participants will not only address the means by which this might be achieved but also the likelihood of doing so in the twenty-first century. Others will focus on why the odds against tampering with the fundamental biology of age changes are so great and what the unintended biological, sociological, political and demographic consequences might be if human aging could ever be slowed or stopped.

"LIFE IS 6 TO 5 AGAINST" - DAMON RUNYON

L. Hayflick, University of California, San Francisco, San Francisco, California

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WHAT WE KNOW FROM CENTENARIANS

T.T. Perls, *1. Boston University School of Medicine, Boston, Massachusetts, 2. Boston University Medical Center, Boston, Massachusetts*

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CAN AGING BE SLOWED AND HOW WILL WE KNOW WE DID IT?

B. Carnes, *University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

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SLOWING AGING: WHAT SOCIAL CONSEQUENCES?

R. Binstock, *Case Western Reserve University, Cleveland, Ohio*

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SESSION 1875 (SYMPOSIUM)

UNIQUE SLEEP CHARACTERISTICS OF OLDER ADULTS

Chair: C.A. Enderlin, *UAMS College of Nursing, Little Rock, Arkansas*
Discussant: K. Richards, *Polisher Research Institute, Abramson Center on Jewish Life, North Wales, Pennsylvania*

More than two-thirds of older adults report impaired sleep which can lead to impaired functional and cognitive abilities. The need for health-care providers to characterize and respond to sleep impairment in our aging population is important to promote optimal quality of life. Two groups at high-risk for disturbed sleep include older adults with cancer and dementia. As a preliminary step in planning sleep interventions,

baseline sleep was analyzed in these two groups and will be presented in this symposium.

OBJECTIVE SLEEP, INSOMNIA SYMPTOMS AND DAYTIME SLEEPINESS IN OLDER WOMEN WITH BREAST CANCER

C.A. Enderlin¹, E.A. Coleman^{1,2}, K. Richards^{3,4}, C. Cole¹, R.L. Kennedy¹, J.A. Goodwin¹, L.F. Hutchins², *1. UAMS College of Nursing, Little Rock, Arkansas, 2. UAMS College of Medicine, Little Rock, Arkansas, 3. Polisher Research Institute, Abramson Center for Jewish Life, North Wales, Pennsylvania, 4. U. of Pennsylvania School of Nursing, Philadelphia, Pennsylvania*

This study described and compared the objective sleep, insomnia symptoms and daytime sleepiness of two groups of older women with and without breast cancer. Participants completed 72 hours of actigraphy, the Insomnia Severity Index and Epworth Sleepiness Scale. Nocturnal awakenings (9 vs 8; expected 2-6/night) and day sleep time (127 vs 120 minutes; expected 14-31 minutes/day) were similar and exceeded expected limits in both groups. Mean sleep onset latency was normal but longer (33 vs 15 minutes; expected < 35 minutes) in the breast cancer group ($p=0.01$). Mean insomnia scores (9 vs 6; normal under 8) reflected subthreshold insomnia in the breast cancer group, with score categories indicating worse insomnia symptoms (19% vs 9%). Mean daytime sleepiness scores score categories indicated excessive sleepiness in one fifth of both groups (22% vs 20%). These findings support baseline screening and intermittent monitoring of sleep in older women with breast cancer.

A DESCRIPTION OF SLEEP PATTERNS IN PERSONS WITH DEMENTIA IN THE NURSING HOME

M. Harris^{1,2,3}, K. Richards^{4,5,6}, *1. College of Nursing, University of Arkansas for Medical Sciences, Searcy, Arkansas, 2. BAGNC Scholar 2007-2009, Little Rock, Arkansas, 3. NGNA Mary Wolanin Graduate Scholarship, Little Rock, Arkansas, 4. Polisher Research Institute, North Wales, Pennsylvania, 5. Professor, University of Pennsylvania, Philadelphia, Pennsylvania, 6. Director, Pennsylvania Hartford Center for Geriatric Nursing, Philadelphia, Pennsylvania*

Studies document that sleep patterns worsen after nursing home placement for persons with dementia. This paper reports 48 hours of descriptive baseline actigraphy data obtained from persons with dementia ($n=47$) in four nursing facilities. The study was part of a larger study of the effects of massage on sleep. Data on minutes of nighttime sleep, sleep latency, sleep efficiency, wake after sleep onset, daytime sleep and day/night sleep ratio were analyzed and stratified by Mini Mental Status Examination (MMSE) scores into three subgroups: mild dementia ($MMSE>15$, $n=11$); moderate dementia ($MMSE 5-15$, $n=23$); and severe dementia ($MMSE<5$, $n=13$). Overall, participants slept 56% of the night and napped 17% of the daytime. Poor sleep hygiene practices and environmental factors could have contributed to poor sleep. Recommendations for nursing practice include recognition of poor sleep patterns and the use of non-pharmacological interventions to promote sleep in persons with dementia in the nursing home.

SESSION 1880 (SYMPOSIUM)

AGING WITH HIV: CHALLENGES TO PHYSICAL AND MENTAL WELLNESS

Chair: M. Brennan, *Center on HIV and Aging, AIDS Community Research Initiative of America, New York, New York*
Discussant: L.D. Moneyham, *University of Alabama at Birmingham, Birmingham, Alabama*

In the US the number of HIV cases among those 50 and older increased by 77% from 2001 through 2005 (CDC, 2006). This age group will comprise over half of the population living with HIV within the next decade. While new HIV infections occur in this age group, most are survivors due to the effectiveness of anti-HIV medications. There

is no cure for HIV, but it is now a chronic manageable illness. Recent data indicate there are high levels of age-associated comorbidities occurring and their onset is at much younger ages. This may be related to the effects of the virus on metabolic processes that have not been defined. Furthermore, HIV treatments do not alleviate the psychosocial challenges faced by those aging with HIV (i.e., stigma, depression). This session will focus on physical and mental health comorbidities of this population. The powerful effects of stigma on the quality-of-life will be detailed. Lastly, interventions will be presented that can improve the physical and mental health of older adults with HIV. The first presentation will examine the prevalence of physical comorbidities and the clinical characteristics of this population. The second paper will discuss the relation of physical health and depression. The third presentation will address the burden of HIV-stigma, and its effects on life quality. The last paper will present an economically viable intervention that can alleviate the high prevalence of mood disorders among these older adults. The discussion will address practice recommendations to insure optimal aging for those growing older with HIV.

CO-MORBIDITY PREVALENCE AND CLINICAL CHARACTERISTICS OF AGING WITH HIV

D. Vance, M. Mugavero, J. Willig, J. Raper, M. Saag, *School of Nursing, University of Alabama at Birmingham, Birmingham, Alabama*

Of the 1.1 million adults infected with HIV in the United States, those adults 50 years of age or older made up 15% of all new HIV diagnoses, 24% of those living with HIV, 29% of those diagnosed with AIDS, and 35% of those who died of AIDS. With the increasing number of older adults with HIV, healthcare professionals will need to know what to expect as this population ages. This cross-sectional study examined the medical records of 1,478 HIV patients from a university clinic from May 2006 to August 2007. Clinical characteristics and patterns of comorbidities were examined across each decade of life. Data reflected that older adults with HIV had lower HIV viral loads but had more comorbidities, in many cases several fold higher. Such comorbidities included hypertension, hypercholesterolemia, hypogonadism, and coronary artery disease, and diabetes just to name a few. Implications for practice and research are provided.

HEALTH COMORBIDITIES AND DEPRESSION IN OLDER ADULTS WITH HIV

R.J. Havlik, S.E. Karpiak, *AIDS Community Research Initiative of America, New York, New York*

Are the high rates of depression found in older adults living with HIV associated with specific diseases or conditions? The study Research on Older Adults with HIV (ROAH: Karpiak et al., 2006) collected self-report health data on almost 1000 NYC HIV positive men and women 50 years and older. An inventory of health problems was compiled as well as CES-D scores (Center for Epidemiologic Studies Depression Scale). Higher CES-D scores indicate increased depressive symptoms. The correlation between CES-D scores and number of comorbidities was significant ($p < 0.001$). Correlations with specific comorbidities varied. Significant correlations with sensory loss as well as dermatological problems suggest these are important disease conditions that may be contributing to the depressive symptoms. Significant correlations exist with heart and respiratory conditions, fractures, and impotence. These associations require further research to understand how high rates of depression are related to comorbidities found in the growing aging HIV population.

THE IMPACT OF STIGMA ON OLDER PEOPLE LIVING WITH HIV/AIDS

C.A. Emler, *University of Washington, Tacoma, Tacoma, WA*

HIV stigma is pervasive and impacts the psychosocial wellbeing of older persons living with HIV/AIDS. Using purposive sampling techniques, 25 HIV+ adults, 50 years and older were interviewed in the

Pacific Northwest concerning HIV stigma and depression. The 25 participants ranged in age from 50 to 72 years ($M = 56.1$, $SD = 5.75$). Seventeen (68%) were male and 40% were people of color. Stigma scores for the sample ranged from 54 to 141 (possible scores of 40-160) with a mean of 94.32 ($SD = 23.12$). Higher scores on the CES-D depression scale were positively correlated with all stigma subscales and overall score. Statistically significant correlations were found between depression and personalized stigma ($r = 0.668$, $p < .001$) negative self-image ($r = 0.709$, $p < .001$), public attitudes ($r = 0.573$, $p < .01$), and overall stigma ($r = 0.627$, $p < 0.001$). The development and testing of stigma interventions should be a priority.

USING THE MACARTHUR MODEL OF TELEPHONE SUPPORT FOR DEPRESSION WITH OLDER HIV-POSITIVE ADULTS

M. Brennan, M. Vega, S.E. Karpiak, *Center on HIV and Aging, AIDS Community Research Initiative of America, New York, New York*

Older adults account for 27% of those living with HIV in the US and are the fastest growing segment of the HIV population. In a large New York City study (Research on Older Adults with HIV; Karpiak et al., 2006), significant depressive symptomatology was 5 times higher in older adults with HIV compared to the general population. We implemented and adapted an intervention based on the MacArthur Model, consisting of a weekly telephone call to "touch base," inquire about current status, and retest biweekly for depression using the PH-Q 9 assessment. Twenty-one older adults with HIV were enrolled. The MacArthur Model was modified to address cultural competency and group-specific issues (phone access, stigma, substance use, numerous medical appointments). Over a 20 week period, levels of depressive symptoms decreased significantly, on average from 18 to 10 points. Implications of these findings and future work with this growing population will be discussed.

SESSION 1885 (POSTER)

CREATING COMMUNITIES FOR AN AGING SOCIETY

LOSING GROUND: RESPONDING TO MANUFACTURED HOME PARK CLOSURES IN OREGON

A. Tremoulet, *Institute on Aging, Portland State University, Portland, Oregon*

Shelter security is essential for the social and physical well-being of older adults. Losing one's home unexpectedly is a catastrophic experience for most people, but especially older adults. Not only do they lose a place to live at a stage in life when resiliency is most challenged, but they also lose connections to friends, memories, community and all that is familiar. The closure of manufactured home parks is a form a gentrification that disproportionately affects older adults. In the US, approximately 41% percent of all manufactured homes occupied as a primary residence are owned or rented by a householder age 50 and older (US Census 2000). Many states permit the creation of "senior manufactured home parks" limited to households with members age 55 and older. This poster will describe a case study of the state policy response to the escalation of manufactured home park closures in Oregon from 2001 through 2007. During this time period, 4% of all Oregon parks closed. These closures were concentrated in urbanized and urbanizing areas of the state. The loss of these parks disproportionately affected low income and elderly households. The poster will summarize the policy outcomes of the 2007 Oregon legislative session and their implications for older adults, Oregon communities, and the continued viability of this housing form favored by older people, particularly those with low incomes.

WEEKLY OUT-OF-HOME ACTIVITY OF OLDER ADULTS AND THE AVAILABILITY OF A CAR

T. Yang, S. DeVane, *Consumer Sciences and Retailing, Purdue University, West Lafayette, Indiana*

Out-of-home activity of older adults is associated with improved survival and better functional status. Using data from the 2006 Health and Retirement Study (HRS) and the 2007 Consumption and Activity Mail Survey (CAMS), this research examined the association between availability of a car, driving status, and control variables on weekly out-of-home activity. The dependent variable was the sum of five activities (shopping or running errands; attending concerts, movies, or lectures; or visiting museums; working for pay; participating in sports or other exercise; and personal visits to friends, neighbors, or relatives). If individuals responded with the hours that they spent in an activity, participation in that activity was counted as 1. The average for all participants was 2.47 out of five activities. Results of OLS regression showed that those who had a car available and those who were able to drive were involved in more activities. However, the availability of a car was more important than driving status. Having more education and having a partner or spouse meant participating in more out-of-home activities. Those who were older, in poorer health, and who experienced more limitations in regard to Activities of Daily Living participated in fewer out-of-home activities. Black respondents had fewer out-of-home activities than White respondents. The results have important implications for public policy related to the availability of transportation of older adults.

ASSESSING STAKEHOLDER OPINIONS ON MEDICAL REVIEW OF IMPAIRED DRIVERS AND FITNESS TO DRIVE

N.M. Silverstein, K. Barton, K. Chan, K. Lloyd, M. Belony, D.A. Gromack, *Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

Driving is the main mode of travel for Americans age 65 and older. Although older drivers are generally found to be safe drivers, aging often brings about functional limitations and an increase in medications that can impede driving fitness. More specifically, aging is accompanied by an increase in the prevalence of such conditions as arthritis, dementia, sleep apnea, and macular degeneration, which may impair critical driving skills and compromise safety. States vary greatly in their approach to licensing and renewal practices related to at-risk drivers. States also vary in their utilization of a Medical Advisory Board and medical review practices. In March 2009, 24 in-person interviews were conducted with Massachusetts stakeholders, including representatives from the state legislature, government agencies, advocacy organizations, licensing authority, medical community, driving assessment centers and mobility planners. Issues covered included: immunity for reporting, mandatory vs. voluntary reporting practices, confidentiality for reporters, licensing and renewal practices, function and composition of the Medical Advisory Board, counter personnel training, driving cessation support, and information on alternative transit. One area that found strong consensus was to join the ranks of other states that already provide immunity for physician reporting of medical conditions that may impact critical driving skills. Less agreement was found regarding criteria for considering accelerated renewal or what role, if any, licensing authorities should have related to driving cessation support and information on alternative transit. The goal of the study is to produce a white paper for continuing the dialogue to strengthen Massachusetts' response to identifying medically-at-risk drivers.

THE RELATIONSHIP BETWEEN SOCIAL SUPPORT AND AGING-IN-PLACE PLANNING

Y. Lee, F. Tang, *University of Pittsburgh, Pittsburgh, Pennsylvania*

While a majority of older adults prefer to live as long as possible in their familiar surroundings, the factors that promote aging in place are not sufficiently examined. This study investigated the relationship between social support and the planning for aging in place. This study

used data from the Community Partnerships for Older Adults Program Survey and the sample was composed of respondents who were living independently either in a rented place or in their own place and who were healthy at the survey time ($N = 2,461$). Social support was used as emotional support and instrumental/informational support. Emotional support was measured by marital status, the number of living child, and social network, which consisted of attendance of religious events and entertainment activities, and getting together with family, friends, or neighbors. Informational support was measured by the extensive knowledge of home- and community-based long-term care services (HCBS) availability (i.e., senior center, adult day program, housekeeping service, senior lunch program, telephone helpline, home repair assistance, visiting nurse service, personal assistance, and door-to-door transportation). Having more social network in the community and knowledge of HCBS were related to an older age which the respondents anticipated to remain living on their own with regular help. Findings have implications for developing more emotional and informational social support resources in the community. Older adults need more opportunities of participating social activities in the community and become aware of the availability and accessibility of HCBS.

TEN YEARS DOWN THE ROAD: PREDICTORS OF DRIVING CESSATION

M. Lunsman¹, E. Bart¹, G. Cissell², J. Edwards¹, *1. University of South Florida, Tampa, Florida, 2. University of Alabama at Birmingham, Birmingham, Alabama*

Introduction: Recent prospective studies have found that cognition, particularly speed of processing and everyday functional performance, predicts driving cessation among community-dwelling older adults (e.g., Ackerman, Edwards, Ross, Ball, & Lunsman, 2008; Edwards et al., 2008). However, these studies have been limited to 5 years of follow-up. The current study used data from the Maryland Older Drivers Project to examine predictors of driving cessation in older adults over a 10-year period. **Methods:** Participants ($N = 1248$) completed baseline and 5-year assessments of performance-based functional abilities. Driving status was ascertained at baseline and annually thereafter. Cox proportional hazard models were used to examine the risk of driving cessation as a function of demographic, physical, and cognitive predictors. **Results:** Older age ($HR = 1.12$, $p < 0.001$), driving fewer days per week ($HR = 0.83$, $p = 0.05$), and slower speed of processing as measured by subtest 2 of the Useful Field of View Test ($HR = 1.76$, $p < 0.01$) were significant predictors of driving cessation. **Conclusion:** These results corroborate previous research and underscore the importance of cognitive speed of processing in the maintenance of driving.

LOCAL GOVERNMENT INNOVATION CREATING AGING-FRIENDLY COMMUNITIES: SURVEY RESULTS

A.J. Lehnig, *School of Social Welfare, University of California, Berkeley, Berkeley, California*

Gerontologists have been describing the potential benefits of aging in place in terms of an older adult's ability to remain independent and enjoy a high quality of life for several decades, as well as the potential impact of adapting the environment on the health and well-being of aging individuals. It remains unclear, however, whether local governments are responding to an expected growth in their older population by adopting and implementing policies, programs, and changes in infrastructure that will improve the health and well-being of their aging residents. The data for this research are based on quantitative results from a mixed method study exploring local government involvement in aging-friendly communities. Online surveys were conducted in the spring of 2009 with city planners, county aging services directors, county transportation planners, and employees of public transit providers in the San Francisco Bay Area. Respondents were asked to identify aging-friendly policies and programs provided by their city or county government in the areas of community design, housing, transportation, health care and

supportive services, and opportunities for community involvement. Respondents also were asked about the factors that contributed to the decision to put these policies and programs in place. This research contributes important information to the burgeoning aging-friendly community literature. Understanding both what local governments are doing and why they are doing it will assist policymakers at all levels of government as they develop strategies to improve the health and well-being of the expanding senior population.

ELDERLY-FRIENDLY ZONING AND LAND-USE PLANNING: AN EVALUATION OF EXISTING POLICY USING RE-AIM

G.L. Byars, *University of North Carolina at Chapel Hill, Chapel Hill, North Carolina*

This poster presents a review of the literature evaluating elderly-friendly zoning and land-use planning policy; focusing upon health, social, economic outcomes. The United States is experiencing a boom in the population of older-adults; 90% of whom live in traditional homes within the community and 80% express a strong desire to remain there. There is a growing call to transform our planning policy to produce elderly-friendly communities, and many communities have added elderly-friendly planning policies. However, there is a lack of research supporting existing policies. While there is overwhelming data to suggest a link between the environment and health and functioning among older-adults, research on community and neighborhood factors is severely limited. This poster represents an evaluation of elderly-friendly land use and zoning policy using the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance). This policy evaluation presents a review of key features of elderly-friendly land-use and zoning policy, the need for such policy, and potential outcomes for individuals and communities. Outcomes on the individual level include health, independence, and social participation. Outcomes on the community level include economic and social impacts to business and government. This evaluation suggests that elderly-friendly planning policy may relate to improved health, functioning, and social connection for older adults and increased growth and income to communities.

RESIDENTIAL RELOCATION IN LATE LIFE: A COMPARISON OF PROACTIVE AND REACTIVE MOVES

N. Pope, *The University of Georgia, Athens, Georgia*

Proactive coping involves anticipating future events or stressors and preparing in advance for them (Aspinwall & Taylor, 1997). Even for stressful events or life changes that cannot be avoided and are still uncertain, such as aging and potential long-term care needs, proactive efforts can promote health and well-being. Studies suggest that older adults who plan ahead are more likely to receive the type of care they prefer and be less of a burden on family members and friends (Brechling & Schneider, 1993; Pinquart & Sorenson, 2002b; USDHHS, 2008b). Housing considerations are also an important consideration in preparing for later life. An older person's decision to move can be made proactively, such as moving to a smaller house or apartment, or reactively, moving because of deteriorating health or the death of a spouse. The purpose of this study is to explore differences between proactive and reactive residential relocation in a sample of older adults. Data was used from Waves 2 and 3 of the Second Longitudinal Study of Aging (LSOA II), a nationally representative sample of persons 70 years of age and older from 1994 to 2000. Based on the theory of proactive coping, reasons for relocating at Wave 2 ($n = 736$) and Wave 3 ($n = 713$) were categorized as either proactive and reactive. Results indicate that the proactive group of movers were younger, more educated, and had higher income. The results provide support for proactive coping theory and its application to residential relocation in late life.

NO ROOM AT THE INN: HOUSING POLICY IMPLICATIONS OF THE SOCIAL CONSTRUCTION OF ELDER HOMELESSNESS IN THE U.S

K. Mills-Dick, *Boston University, Boston, Massachusetts*

According to recent estimates, there are over 75,000 homeless elders in the U.S. today (Cunningham & Henry, 2007; Gibeau, 2001). Such numbers represent the failure of both the aging and homeless service systems to meet the needs of the most vulnerable older adults in our communities. In the housing and aging literatures, little attention has been paid to the homeless elderly (Martin, 1990; Tully & Jacobson, 1994), and research on homeless elders remains limited (Crane, 1994). While a significant network of policies and programs exists to meet the economic and health needs of older adults, the plight of homeless older adults has largely been ignored. Similarly, policy responses to homelessness generally do not highlight or emphasize older adults as a target population. This presentation will explore the historical development and implementation of policies and programs addressing homelessness, with particular attention to the inclusion of and impact on the subgroup of older adults. With an emphasis on theories of homelessness and the social construction of social problems, this presentation will discuss changing conceptions and shifting constructions of elder homelessness. Particular attention will be paid to the ways in which various constructions of homeless older adults have both impacted and been influenced by a range of policies throughout U.S. history. This presentation will highlight the role of social problem construction and definition in the policy process (Pal, 2006) and discuss implications for including the perspectives of marginalized populations in problem resolution and policy responses.

SESSION 1890 (SYMPOSIUM)

DIMENSIONS OF RETIREMENT INSECURITY IN AN ECONOMIC DOWNTURN: CAUSES AND OPTIONS

Chair: C.E. Bishop, *Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

Discussant: J. Schulz, *Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

This recession has battered several of the supports that sustain security in retirement, including portfolios, market value of owner-occupied housing, post-retirement health benefits, and access to jobs. The panel will begin with presentation of a multidimensional standard for economic security and risk that proposes thresholds for five aspects of retirement security, demonstrating that risk is both widespread and unevenly distributed. When translated to the state level, the measure can be used to track impact of state policies. The housing bubble induced some home owners to extract equity from housing assets for other purposes, and our second panelist presents evidence about the impact this has on economic security in retirement. Work choices over the life course affect the value of the assets available to fund retirement. Our third speaker will consider the role of work life trajectories in determining the distribution of economic wellbeing and risk in retirement. The final panelist will update us on the impact of this particular recession on retirement security, and the implications for public policy.

THE HOUSING BUBBLE AND RETIREMENT SECURITY

M. Soto¹, A.H. Munnell², 1. *The Urban Institute, Washington, District of Columbia*, 2. *Center for Retirement Research at Boston College, Chestnut Hill, Massachusetts*

House prices rose 60 percent between 2000 and 2007 before the bubble burst. The question is whether the housing bubble made people better or worse prepared for retirement. Using the Survey of Consumer Finances this paper investigates the probability of households extracting home equity through an increase in housing-related debt, the probability that they use their housing-related borrowing for consumption, and finally the factors that determine the level of consumption spend-

ing out of their increased debt. The results show that while homeowners appear to take the present discounted value of future rents into account, many of them extracted equity and used it for consumption. A substantial proportion – perhaps 30 percent – of older households will be less secure in retirement because of the housing bubble.

LIVING LONGER ON LESS: THE NEW ECONOMIC (IN)SECURITY OF SENIORS

T. Meschede, L. Sullivan, T. Shapiro, *Heller School, Brandeis University, Waltham, Massachusetts*

We created the Senior Financial Stability Index to measure long-term economic security of senior households throughout their retirement years. The fundamental components that frame economic stability for older Americans are housing costs, healthcare expenses, household budgets, home equity, and household assets. We find that 78 percent of all senior households are financially vulnerable and 84 percent of single senior households face financial insecurity. More than half of all senior households lack financial resources to meet lifetime projected expenses, and household budgets don't allow for additional savings for larger and unforeseen expenses for one-third of senior households. Further, paying out-of-pocket health expenses is burdensome for 25 percent of senior households, and high housing costs put 45 percent of their budgets at risk. These compelling statistics reflect the realities of many seniors and demonstrate the roots of economic security and fragility – a fundamental mismatch between income and costs of essential and other expenses.

WOMEN'S FINANCIAL SECURITY: COMPLEX LIVES IN DIFFICULT TIMES

M. Hardy, M. Hidajat, *Sociology, Penn State, University Park, Pennsylvania*

Women's financial security in old age has generally been linked to two social institutions—marriage and the labor market. As more highly educated cohorts of women move into older age, both of these pathways carry considerable risk of dissolution. Our analyses of the National Longitudinal Surveys of Women, launched in the late-1960s and continued through 2003, reveal the complex patterns of women's lives and how different patterns of attachment set women on different pathways of financial (in)security. Maintaining a balance between work and family responsibilities challenged 20th century women. As long term relationships, either with spouses or with employers, become less common, an important policy question for this century involves the trade-off between 'flexibility' and 'insecurity.'

SHORING UP RETIREMENT SECURITY

G.A. Mackenzie, *Public Policy Institute, AARP, Washington, District of Columbia*

U.S. workers have seen their investments dwindle, jobs disappear, and retirement plans thrown off track as a result of the worst economic crisis most Americans have ever experienced. This presentation will take stock of the impact of the recession on retirement security. It will assess the state of defined benefit (DB) pensions and acknowledge lessons learned about the vulnerabilities of the defined contribution (DC) system exposed by the market downturn. It will then discuss options for improving the security of the retirement system, including improving DC plans, ensuring the security of DB plans, and enhancing and securing Social Security. It will also examine options for "second tier" or "universal 401(k)" plans.

SESSION 1895 (SYMPOSIUM)

FRONTLINE WORKERS IN ASSISTED LIVING: MAXIMIZING SATISFACTION AND RETENTION

Chair: M. Ball, *Georgia State University, Atlanta, Georgia*

Discussant: F. Whittington, *George Mason University, Fairfax, Virginia*

Despite the recent growth of the assisted living (AL) industry, little research has addressed the growing shortage of direct care workers (DCWs) in this setting. DCWs often are called the centerpiece of the formal long-term care system, and this symposium will present key findings from a mixed methods study of how to maximize satisfaction and retention of these workers in AL (5R01 AG021183). The study sample included 400 DCWs and 44 administrators from 45 AL facilities in Georgia. The symposium will provide an overview of study methods, placing Georgia workers and facilities within the national AL context, and include both qualitative and quantitative investigations of topics central to the maintenance of a quality frontline workforce. In the first presentation, the authors use grounded theory methods to examine co-worker relationships, the factors that influence their maintenance and development, and the influence that these relationships have on DCW satisfaction and retention. Next, multilevel modeling techniques are utilized to explore the effects of individual, facility, and community characteristics on job satisfaction, intent to turnover, and actual turnover. The third presentation is a qualitative examination of reward systems found in these diverse settings and the multilevel factors that influence the tangible and intangible meanings they have for DCWs. In the final presentation, authors highlight the study's principal findings and present a model that encapsulates the key elements and outcomes of the process of maximizing the satisfaction and retention of DCWs in AL. A leading AL scholar will serve as discussant for this symposium.

CO-WORKER RELATIONSHIPS IN ASSISTED LIVING: THE INFLUENCE OF SOCIAL NETWORK TIES

C. Hollingsworth¹, M. Perkins², W.M. Sweatman¹, *1. Georgia State University, Atlanta, Georgia, 2. Emory University, Atlanta, Georgia*

In this study, we use grounded theory methods to examine co-worker relationships and the influence that these relationships have on satisfaction and retention of DCWs. We focus on staff-staff relationships as well as the relationships that DCWs have with their direct supervisors and facility administrators. We find that social networks (relationships with family, friends, and former co-workers and employers) are a key factor leading DCWs into employment in these homes. However, we find that these network ties are not necessarily close ties and that this pattern of job referral does not always lead to a cohesive social environment. DCW and administrator turnover, as well as strategies participants use to survive economically, are important intervening factors that influence facility work culture. Findings have implications for interventions to promote organizational commitment and reduce staff turnover, which can improve resident care and reduce threats to DCWs,' as well as facility operators' economic security.

A MODEL FOR MAXIMIZING SATISFACTION AND RETENTION OF DIRECT CARE WORKERS IN ASSISTED LIVING

M. Ball¹, M. Perkins², C. Hollingsworth¹, C.L. Kemp¹, *1. Georgia State University, Atlanta, Georgia, 2. Emory University, Atlanta, Georgia*

Based on findings from a statewide study we present a model depicting the key elements and outcomes of the process of maximizing satisfaction and retention of direct care workers (DCWs) in assisted living. This model integrates our qualitative and quantitative findings and makes connections between the range of factors influencing satisfaction and retention. Multiple factors at the societal, industry, community, facility, and individual levels influence DCWs' motives for becoming paid caregivers and the rewards they receive from their jobs. Both motives and rewards have moral, material, and professional meanings that affect

DCWs' job satisfaction and retention. Multiple study findings establish the importance for DCWs of their relationships with residents and of receiving affirmation for the work they do. DCW job outcomes in turn have bearing on broader outcomes for residents' quality of care, for DCWs' position in society and in the labor market, and for the economic development of communities.

REWARDING WORKERS IN ASSISTED LIVING

C.L. Kemp, M. Ball, C. Hollingsworth, *The Gerontology Institute, Georgia State University, Atlanta, Georgia*

In this paper we examine reward systems in assisted living, consider the meanings they hold for direct care workers (DCWs) and identify factors that influence both. Analysis indicates that mean hourly wages are low (\$8.30), advancement opportunities are few, and access to and enrollment in benefits programs are not universal. Some facilities recognize DCWs through programs such as employee of the month, bonuses or appreciation events. Reward structures are influenced by facility size, location, resident census, fees, and ownership type, and by DCWs' work experience and performance. Most DCWs perceive their wages as unfair and would prefer greater extrinsic rewards. Many find "little stuff" such as verbal praise, affirming which is meaningful. Thus, although DCWs' personal characteristics and preferences influence the meaning of rewards such that no single reward type works for all DCWs forever, all want and need affirmation for their contribution to resident care and facility operation.

FACTORS ASSOCIATED WITH TURNOVER IN ASSISTED LIVING: A MULTILEVEL ANALYSIS

M. Perkins¹, R. Adelman³, C. Furlow⁴, W.M. Sweatman², J. Baird², 1. Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, Atlanta, Georgia, 2. Georgia State University, Atlanta, Georgia, 3. University of Buffalo, SUNY, Buffalo, New York, 4. Centers for Disease Control and Prevention, Atlanta, Georgia

Over the past thirty years, many conceptual models of the turnover process in long-term care have been proposed. However, few studies investigating these relationships have accounted for the hierarchical nature of the data, failing to acknowledge the inter-dependence that exists among staff within the same facility and leading to biased estimates. We use multilevel modeling techniques to explore the effects of individual, facility, and community characteristics on three outcome variables: 1) overall job satisfaction; 2) intent to turnover; and 3) actual turnover. Findings show that facility and community level factors explain little variation in actual turnover, the final outcome measure, which suggests that decision-making regarding turnover is a highly individualized process. In contrast, net of individual-level factors, macro-level factors explain substantial variation in overall job satisfaction and intent to turnover. The final model of turnover we present provides an analytic framework that can guide future investigations into these relationships.

SESSION 1900 (PAPER)

IMPROVING DEMENTIA CARE

PERFORMING DEMENTIA: INTERDISCIPLINARY APPROACHES TO CREATIVE CLINICAL CARE

J. McGovern, *Silver School of Social Work, New York University, Brooklyn, New York*

Interdisciplinary approaches to dementia research belie received wisdom. The majority of dementia literature focuses on either the person with dementia or the caregiver, and tends to confine the experience to decline, despair and deficits. However, recent studies from fields such as nursing, anthropology, occupational therapy, and cultural studies that acknowledge the condition's affect on relationships as well as individuals, demonstrate that an enduring, albeit transformed and evolving,

sense of relatedness can lead to positive outcomes. These include slowing progress of the disease, and increasing the wellbeing of all members of dementia-affected relationships. The infusion of new variables, such as spiritual growth, wisdom, and satisfaction, and new units of analysis, including couples and families, provide entry to creative care. New theoretical orientations contribute as well. Through the lenses of life course and performance theory, creative clinical care options become apparent. Linking the life course suggestion that human development continues into late-life, with the performance theory concept that meaning-making can occur in embodied exchange, has encouraged development of interventions geared toward dementia-affected families – for example, Alzheimer's cafes, couples counseling, and assisted vacations. Emergent international research shows that the verbal and non-verbal practice of "we-ness" allows for positive developmental outcomes heretofore undiscovered. This presentation takes an interdisciplinary perspective to explore the lived experience of dementia through the lens of life course and performance theory. Findings suggest implications for dementia care, particularly for couples and families.

CATAPULTING SHIFTS IN IMAGES, UNDERSTANDINGS AND ACTIONS THROUGH RESEARCH-BASED DRAMA

S.L. Dupuis¹, J. Gillies¹, G. Mitchell², C. Jonas Simpson², C. Whyte¹, J. Carson¹, 1. Murray Alzheimer Research and Education Program, University of Waterloo, Waterloo, Ontario, Canada, 2. York University, Toronto, Ontario, Canada

Postmodernist critiques of traditional ways of reporting qualitative research have led to alternative ways of writing and representing research, what Richardson (2000) calls creative analytic practices. Research-based-dramas, as one example of creative analytic practice, have been recognized as an effective medium for translating research about illness into communities of practice including healthcare professionals, policy makers, persons living with illness, families, and the general public. Nonetheless, our understanding of the impact of research-based drama is quite limited and in the very early stages of development. This paper examines how personal images, understandings, and actions change for family members of persons with dementia after the introduction of a research-based drama called I'm Still Here. The drama is based on research conducted with persons living with dementia and with daughters, expressing their experiences of living with loss. Guided by a hermeneutic phenomenological approach, a set of seven focus groups were conducted with diverse family members (n=48) in four different cities in Ontario, Canada. Focus groups were conducted immediately prior to viewing I'm Still Here and directly following a performance. Findings suggest that three major phenomenological shifts occurred for the family members including diminishing humanness to discerning humanness, detached caring to reflective engaging, and terrifying projections to hopeful possibilities. Our research suggests that research-based drama can have a profound impact on family members caring for those with dementia by engaging, awakening, and expanding understandings of dementia that transform both images and actions. Funded by the Social Sciences and Humanities Research Council in Canada.

FAMILY CAREGIVER VS. NON-CAREGIVER PERCEPTIONS OF DEMENTIA SCREENING

M.D. Justiss^{1,2}, M. Boustani^{1,2,3}, 1. Indiana University, Indianapolis, Indiana, 2. Indiana University Center for Aging Research, Indianapolis, Indiana, 3. Regenstrief Institute, Inc., Indianapolis, Indiana

Objectives: The purpose of this study is to explore differences in the perceptions of dementia screening between family caregivers of patients with Alzheimer's disease (AD) and older adult non-caregivers. Design: A cross-sectional study. Setting: Primary care clinics in Indianapolis, IN. Participants: A convenience sample of 81 family caregivers and 125 older adult (65+) non-caregivers. Measurement: Acceptance of dementia screening and its perceived harms and benefits as determined

by the PRISM-PC questionnaire. Results: Non-caregivers had significantly higher acceptance scores. Both caregivers and the non-caregivers agreed that screening is beneficial. Caregivers had significantly lower perceived stigma and impact on independence and significantly higher perceived suffering. The top three identified harms from screening by both caregivers and non-caregivers were emotional suffering by the family, loss of driving privileges and becoming depressed. Conclusion: By identifying unique perspectives of caregivers with first hand experience with AD, we are in a better position to understand the risks and benefits of screening in order to improve the process for early identification. It would appear there is a complex interaction of perceived harms and benefits making it difficult to determine whether the benefits of dementia screening outweigh the potential harms. Targeting these barriers will aid in the development of individualized counseling programs embedded within primary care. These programs may reduce the burden and stress experienced by caregivers as the disease progresses and their role increases, thus facilitating early diagnosis of dementia and setting the stage for early intervention with both patients and caregivers where necessary.

DEFINING PERSON-CENTRED CARE: THE VIEWS OF PEOPLE WITH DEMENTIA, FAMILY CARERS AND PROFESSIONALS

C. Bamford¹, M. Poole¹, J. Hughes^{2,4}, C. Kirkley¹, H. Arksey³, L. Corner⁴, J. Bond^{1,4}, 1. *Institute of Health & Society, Newcastle University, Newcastle upon Tyne, United Kingdom*, 2. *Northumbria Healthcare NHS Foundation Trust, North Tyneside, United Kingdom*, 3. *University of York, York, United Kingdom*, 4. *Newcastle University - Institute of Ageing & Health, Newcastle upon Tyne, United Kingdom*

Delivering person-centred care continues to be a key aspiration for services, including those providing respite care. However, there is little consensus over the meaning of person-centred care in academic literature and little explicit guidance in UK policy documents. As part of a broader study, we conducted focus groups and face-to-face interviews to explore the components of person-centred care from the perspectives of six people with dementia, 16 family carers and 21 professionals. Additional data were drawn from 58 telephone interviews with a range of professionals. Nine components of person-centred care were identified: - Respecting individuality and values - Enhancing psychological well-being - Promoting autonomy - Promoting a sense of shared responsibility - Fostering social context & relationships - Enhancing communication - Meeting physical & personal needs - Developing a therapeutic alliance - Valuing expertise Subsequent observation within six contrasting respite care services provided examples of how each component was promoted or undermined in day-to-day practice. These data will be used to illustrate the components at both a conceptual and practical level. The relative importance of components varied between groups of stakeholders, with people with dementia placing most emphasis on social context and relationships; family carers focusing on psychological well-being; and professionals emphasising individuality and values. The data also indicate wide variations in the extent to which the components are achieved in practice. The potential use of the components of person-centred care for service evaluation will be explored.

SESSION 1905 (SYMPOSIUM)

PRESCRIPTION DRUG AND ALCOHOL USE AMONG OLDER ADULTS: MULTIDISCIPLINARY APPROACHES AND PERSPECTIVES

Chair: T. Shaffer, *University of Maryland, The Peter Lamy Center for Drug Therapy and Aging, Baltimore, Maryland, University of Maryland, School of Pharmacy, Department of Pharmaceutical Health Services Research, Baltimore, Maryland, University of Maryland, Doctoral Program in Gerontology, UMB/UMBC, Baltimore, Maryland*

Discussant: L. Schonfeld, *University of South Florida, College of Behavioral and Community Sciences, Tampa, Florida*

This Symposium looks at the topic of prescription drug and alcohol use in among older adults from four vantage points from four investigators. The presentations are organized by context and method. The first will look at the broad cultural determinants that help set up the dynamics that are influential in medication use among women through a qualitative lens. That is followed by use of the family as a specific context and uses structural equation modeling to examine the relative roles that stressful events, perceived stress, and social support play in alcohol-related problems. The idea of context is then shifted and looks at the influence of social support, depression, and physical disability in the potential medication misuse for a population receiving opioids at a Veterans Administration Medical Center using regression analysis. The final presentation uses the narrowest of contexts and chronicles the development of a new measure that can be used to establish variation in medication regimens for residents of long-term care settings. These four presentations highlight the variety of research that result from a multidisciplinary approach to a similar topic using qualitative, psychological, biopsychosocial, and pharmacologic frameworks.

STRESSFUL EVENTS, PERCEIVED STRESS AND ALCOHOL AMONG OLDER ADULTS: DOES FAMILY HISTORY MAKE A DIFFERENCE?

P.G. Sacco¹, K.K. Bucholz², N. Morrow-Howell¹, 1. *Social Work, Washington University, St. Louis, Missouri*, 2. *Washington University School of Medicine, St. Louis, Missouri*

Research on the role of stress on alcohol consumption and alcohol-related problems has been mixed, with some studies identifying associations and other studies finding no relationship. Based on developmental psychopathology, stress related risks are nested in the earlier risks like family history of alcoholism (FH+); this study analyzed the role of FH+ in stress and alcohol relationship. We hypothesized that FH+ subsamples would display stronger stress/alcohol relationships. In a national probability sample (60+; current drinkers), multiple group structural equation models compared the relationship of stressful events, perceived stress and social support in FH+ versus FH- samples. Three groups consisted of children of alcoholics (n=704), other family (n=1366) and those with no history (n=2241). SEM models tested relationships between stress constructs and average consumption, at-risk drinking and alcohol problems. Contrary to hypothesis, perceived stress was associated with alcohol related problems (B=.17; z=2.95; p<.001) in the subgroup with no family history.

RISK FACTORS ASSOCIATED WITH OPIOID MEDICATION MISUSE IN COMMUNITY-DWELLING OLDER ADULTS WITH CHRONIC PAIN

J. Park, *School of Social Work, University of Maryland, Baltimore, Maryland*

The study explored patterns of opioid medication use among community-dwelling older adults with chronic pain and examined biological, psychological, and social risk factors associated with opioid medication misuse in this population. A sample of 163 older men and women currently receiving opioid medication(s) due to chronic pain was sur-

veyed regarding demographic information, frequency and duration of consuming opioid medications, and proposed risk factors. In the cross-sectional research design, the survey was administered in outpatient clinics affiliated with the Baltimore Veterans Affairs Medical Center and the University of Maryland Medical System. Descriptive and OLS regression analyses were conducted. The findings revealed a relatively high prevalence of long-term users of opioid medication in the sample and the potential for these users to become addicted to the medications. The study findings indicated that physical disability, depression, and lack of social support were significantly associated with opioid medication misuse.

THE INFLUENCE OF CULTURE ON PRESCRIPTION DRUG USE AMONG OLDER WOMEN

S.L. Canham, *Doctoral Program in Gerontology, UMB/UMBC, Baltimore, Maryland*

This paper concerns medication use by community-dwelling older women. To the extent that differences among individuals are in part a result of cultural factors or how individuals interact within their culture, it is expected that there are differences in the experience of prescription drug use and the development of dependency. For instance, unique life experiences may lead older women to experience and interpret medications differently. Also, the cultural backdrop against which older women interact with their physicians, receive prescriptions, and understand their health and illness is important. A more thorough description of why older women are especially prone to prescription drug misuse will be presented as well as an argument for how culture influences dependency in older women. The guiding question of this paper is, "What is it about an older woman's culture that predisposes her to an increased risk of prescription drug use?"

MEASURING THE UNMEASURED – ESTABLISHING THE VOLATILITY OF DRUG REGIMENS FOR RESIDENTS IN LONG-TERM CARE SETTINGS

T. Shaffer, 1. *University of Maryland, Doctoral Program in Gerontology, UMB/UMBC, Baltimore, Maryland*, 2. *University of Maryland, The Peter Lamy Center for Drug Therapy and Aging, Baltimore, Maryland*, 3. *University of Maryland, School of Pharmacy, Department of Pharmaceutical Health Services Research, Baltimore, Maryland*

Use of prescription medications is endemic in long-term care settings where over 98% of residents receive at least 1 drug, and commonly reported numbers of medications used is 7-9 per month. Use of medications in this setting is dynamic over time and only a small proportion of this population consistently receives the same monthly regimen. Despite this therapeutic reality, there are no available measures that can be used to establish the degree of change in therapeutic regimens over time. The ability to measure volatility can quantify another dimension of overall drug burden and identify residents who are at a higher risk of experiencing an adverse drug reaction. This presentation chronicles the creation of a new measure of medication regimen volatility using commonly available drug information (e.g., drug names, counts, therapeutic classification). Comparisons of measure performance will be shown and analytic considerations required when quantifying and evaluating volatility will be discussed.

SESSION 1910 (SYMPOSIUM)

SHOULD I STAY OR SHOULD I GO? HURRICANE KATRINA'S IMPACT ON NURSING HOME RESIDENTS' OUTCOMES

Chair: K. Hyer, *School of Aging Studies, University of South Florida, Tampa, Florida*

Discussant: T. Bowman, *Department of Health and Human Services, Atlanta, Georgia*

Hurricane Katrina devastated the Gulf Coast in August 2005 causing untold human suffering among elders and billions of dollars worth of damage. This symposium reports on the morbidity and mortality affects of the Hurricane on frail nursing home residents and evaluates the impact on resident outcomes of the nursing homes' decision to evacuate or shelter in place in the face of hurricane warnings. Using data from four impacted states (Louisiana, Mississippi, Alabama, and Florida) we identified 59 nursing homes that evacuated residents during Katrina. We describe and compare resident outcomes for evacuating nursing homes compared to residents who sheltered in place at 150 homes in the same counties. Furthermore, a comparison of morbidity and mortality for the affected facilities are made using control data for residents residing at the same nursing homes during a similar period of 2004 (a non-hurricane year). This symposium will first describe the goals of the research, then provide the methodology utilized to create the data sets and then present 1 month, 3 month, and 6 month data on the morbidity, mortality and functional decline of residents. Finally, the political and economic challenges providers face to sheltering residents in place will be detailed. Our discussant will summarize the policy considerations concerning nursing homes and the decision to evacuate versus shelter residents in place.

OBJECTIVES OF SAFEHAVEN STUDY

V. Mor, K. Hyer, Z. Feng, D. Dosa, L.M. Brown, *Community Health, Brown University, Providence, Rhode Island*

Strategic Approach to Facilitating Evacuation by Health Assessment of Vulnerable Elderly in Nursing Homes (SAFE HAVEN) Study is an RO1 study. Using Medicare claims, quarterly NH resident assessment data, longitudinal facility files and geo-coded data on each hurricane hitting Florida and the Gulf coast states between 2004 and 2007, we estimate the impact of hurricanes on NH residents' morbidity and mortality. Using the distance between the nursing home and the predicted path of Hurricane Katrina as an instrument, we will estimate the effect of the decision to evacuate or shelter in place on residents' outcomes at 1,3 and 6 month periods.

IDENTIFYING NURSING HOMES AND RESIDENTS IMPACTED BY HURRICANES

Z. Feng¹, K.S. Thomas², D. Dosa¹, K. Hyer², L.M. Brown², V. Mor¹, 1. *Center for Gerontology & Health Care Research, Brown University, Providence, Rhode Island*, 2. *University of South Florida, Tampa, Florida*

This presentation describes the hurricane forecasting model we use to identify the geographic location of nursing homes at risk for evacuation 48 hours prior to the hurricane landing in the event of Hurricane Katrina in August 2005. Based on the forecasted path of Katrina 48 hours before its landfall, we identified 209 nursing homes located in 42 "at-risk" counties from 4 states (LA, MS, AL, and FL), of which 59 homes evacuated and the remaining 150 sheltered in place. A total of 14,623 elderly residents in these 209 facilities met our inclusion criteria in the pre-storm baseline sample. Merging MDS, inpatient claims and Medicare enrollment data, we tracked these residents up to 180 days post Katrina to define their morbidity, hospitalization and mortality outcomes. We compare characteristics of facilities (from OSCAR) that evacuated versus those that sheltered in place as well as post-storm resident outcomes by evacuation status.

MORTALITY AND HOSPITALIZATION OF NURSING HOME RESIDENTS EVACUATED VERSUS SHELTERED IN PLACE DURING KATRINA

K. Hyer¹, L.M. Brown¹, D. Dosa², Z. Feng², K.S. Thomas¹, V. Mor², 1. *School of Aging Studies, University of South Florida, Tampa, Florida*, 2. *Brown University, Providence, Rhode Island*

Long-stay nursing home (NH) residents are especially vulnerable to natural disasters, as they have extensive care needs and therefore, higher disaster-associated risks. This paper describes the affects of Hurricane Katrina on 14,623 long-stay nursing home (NH) residents in 209 facilities that were in the path of Katrina. We compare the mortality and hospitalization rates of these residents related to whether the residents were evacuated from the NH or sheltered in place. Additionally, we evaluate the differences in mortality and hospitalizations at 30, 90, and 180 days relative to control data from the same NHs during 2004. Residents are tracked by linking Minimum data set (MDS) records matched to Medicare claims. The trauma and risk of evacuation versus sheltering residents will be discussed.

IMPACT OF EVACUATION ON ADL DECLINE, FALLS, DELIRIUM

D. Dosa², L.M. Brown¹, Z. Feng², K. Hyer¹, K.S. Thomas¹, V. Mor², 1. *School of Aging Studies, University of South Florida, Tampa, Florida*, 2. *Brown University, Providence, Rhode Island*

This paper describes the affects of hurricane disasters on the morbidity of nursing home (NH) residents. We compare the morbidity (e.g. falls, functional decline, and behavioral symptoms such as delirium) of NH residents related to hurricane exposure at 30, 90, and 180 days relative to control data from the same NHs during 2004. Additionally, we evaluate the differences in morbidity related to evacuation status (e.g. before, after, or sheltered in place). Morbidity will be ascertained using data from the Minimum Data Set (MDS) and Medicare claims. A decline in Activities of Daily Living will be measured comparing the most recent MDS prior to the storm with those obtained subsequent to the hurricane. Data related to falls will be obtained from the MDS and from Medicare claims where falls were coded as a primary diagnosis. Finally, delirium will be determined using two previously published MDS scales proposed by Marcantonio and Dosa.

CHALLENGES PROVIDERS FACE TO SHELTER RESIDENTS IN PLACE: THE POLITICAL AND ECONOMIC CHALLENGES PROVIDERS FACE TO SHELTERING RESIDENTS IN PLACE

L. Polivka-West, K. Hyer, L.M. Brown, *FL Health Care Assoc, Tallahassee, Florida*

Emergencies can be a relatively localized event, such as aircraft crashes and tornadoes, or may encompass large geographic regions, such as hurricanes and wildfires. The speed at which events occur can vary greatly – Hurricane Katrina was tracked as a monster storm for at least 2 to 3 days prior to landfall, while Hurricane Wilma intensified explosively. While planning for every scenario is impossible, laws and regulations require comprehensive planning to ensure the protection of long term care facility residents, their proper nutrition and hydration, adequate staffing before, during, and after the event, essential communications with families and officials. Panelists will discuss the challenges of maintaining generator power with power outages, providing ongoing dialysis and vent care, planning for possible fuel and supply shortages, staffing concerns and dealing with the lack of consistent federal coverage policies.

SESSION 1915 (PAPER)

UNDERSTANDING AND TREATING MENTAL DISORDERS

ASSESSMENT OF PTSD IN OLDER PEACEKEEPERS: THE POSTTRAUMATIC STRESS DISORDER CHECKLIST: MILITARY VERSION (PCL_M)

E. Yoon, *School of Social Work, Jackson State University, Jackson, Mississippi*

As wars and conflicts continue, there is increasing concern for peacekeepers in conflict zones, many who are at high-risk for PTSD. Given rising deployments of military forces on peacekeeping missions to various conflict zones, it is important to better understand the risk factors for PTSD of these veterans. The goal of this study about trauma and its effect in older adults, especially peacekeepers and veterans is to contribute to a knowledge gap. The Posttraumatic Stress Disorder Checklist: Military Version (PCL_M) is a 17-item, self-report measure of PTSD symptomatology in military veterans, provides on total score and four subscale scores for older peacekeepers' PTSD (re-experiencing, avoiding, numbing, and hyperarousal symptoms). 456 male older peacekeepers with deployed experiences were selected from a larger survey data by Veterans' Affairs Canada. The PCLM scores ranged from 17 to 83 (Mean+ SD = 23.73+ 10.25). With different cutoff score of 31 (44 & 50), 17% (7% & 3%) of total respondents may be considered for diagnosis with PTSD. Overall scale reliability was excellent with alpha of .93 and subscale alphas ranged from .81 to .90. Confirmatory factor analysis confirmed the best fit of 4 first-order model. Validity was confirmed through significant association of the PCL_M scores with well-established measures of depression, substance abuse, and general health indices. This study implied that the deployed combat experiences among older peacekeepers may be associated with the development of PTSD, which may be linked to age-related affective disorders and substance abuse disorders. The PCL_M is recommended as a reliable and valid tool for the clinical and empirical assessment tool screening the PTSD symptomatology specifically related to military experiences for older veterans. The PCL-M can be also recommended as an effective and efficient component of a comprehensive veteran based compensation and pension evaluation.

MENTAL DISORDERS AND ANTIPSYCHOTIC USE AMONG NON-ELDERLY NURSING HOME RESIDENTS

S. Simon, D. Lipson, C. Stone, *Mathematica Policy Research, Cambridge, Massachusetts*

Over the past two decades, several federal laws have been enacted to ensure that people with serious mental illness, especially those under age 65, are not institutionalized improperly and can receive appropriate treatment in the community. To determine whether these laws are working as intended, it is important to monitor the number of working-age nursing home residents with mental illness. This study used Medicaid claims [Medicaid Analytic Extract (MAX)] data to calculate the percentage of nursing home residents under age 65 with a documented mental disorder or a claim for antipsychotic medication. In 2002, 134,420 Medicaid beneficiaries aged 22 – 64 were residents in a nursing home for at least six months in our forty-seven state sample. On average, nearly 16 percent had a primary or secondary mental disorder diagnosis; this proportion varied considerably by state, from 5.4 to 29.3 percent. Further, 46 percent of our sample had at least one claim for antipsychotic medication, ranging from 12.7 to 70.1 percent. The high percentage of younger nursing home residents receiving antipsychotics relative to the proportion with a diagnosis of mental illness raises questions about possible medication misuse. These findings underscore a need for further research to understand the determinants of state variation such as: 1) the effectiveness of state PASRR programs in identifying people who should be receiving care in the community, 2) the extent to which nurs-

ing facilities are substituting for institutions for mental disease for Medicaid beneficiaries under age 65, and 3) availability of community based mental health services.

PERSONAL SUPPORT NETWORKS AMONG AGING MOTHERS AND THEIR MENTALLY ILL ADULT DAUGHTERS

J.E. Balestrery, L. Chadiha, R. Dunkle, B. Ingersoll-Dayton, *University of Michigan School of Social Work, Ann Arbor, Michigan*

Since the 1950s, research on families with mental illness has addressed social support and support networks with little attention to aging mothers. This study examines received and reciprocated social support between aging mothers and severe mentally ill adult daughters using qualitative interview data from a purposive sample of 22 aging mothers, 52-90 years old. This study utilizes a multi-dimensional framework to investigate aging mothers' relationships with personal support network (PSN) members in areas of support structure (network composition), support types (emotional/instrumental), and support patterns (received/reciprocated). The presence of adult daughters in aging mothers' support structure was predominant; aging mothers received and reciprocated across all categories of emotional/instrumental support more often than not; overall, aging mothers reciprocated emotional/instrumental support to all PSN members more than received from all PSN members. These findings suggest professionals should consider adult daughters and both patterns of received/reciprocated network support in working with aging mothers.

UNFORGIVENESS, RUMINATION AND DEPRESSION AMONG OLDER ADULTS

B. Ingersoll-Dayton¹, C. Torges², N. Krause³, *1. School of Social Work, University of Michigan, Ann Arbor, Michigan, 2. North Dakota State University, Fargo, North Dakota, 3. University of Michigan, Ann Arbor, Michigan*

Understanding the factors that contribute to depression in later life can help mental health practitioners develop interventions to prevent or remediate this problem. One possible source of geriatric depression is older adults' inability to forgive themselves for transgressions they have committed that have been hurtful to others. Unforgiveness may result in enduring ruminations that lead to and exacerbate depression. This paper tests a model that includes older adults' experience of unforgiveness as a precursor of depressive symptoms. Data were gathered from a national probability sample, the Religion, Aging and Health Survey, based on interviews with adults aged 66 and over (n=996). Structural equation modeling was used to test a conceptual model including five constructs: unforgiveness from God, unforgiveness from others, unforgiveness from self, rumination and depressive symptoms. The goodness of fit indices (NFI=.99; GFI=.99) indicated that our conceptual model had a good fit with the data. Further results showed that: 1) rumination mediated the relationship between self-unforgiveness and depressive symptoms; and 2) self-unforgiveness and rumination mediated the relationship between unforgiveness by God and depressive symptoms as well as between unforgiveness by others and depressive symptoms. Findings from this study identify some important pathways to geriatric depression. Implications for practice include the importance of asking about unforgiveness when working with depressed older adults. It may be particularly significant for mental health practitioners to explore unforgiveness from multiple sources (i.e., God, others, and self) and to assess the extent to which these sources of unforgiveness trigger obsessive ruminations.

QUALITATIVE FINDINGS FROM A RANDOMIZED CLINICAL TRIAL OF PSYCHOTHERAPY FOR ELDERLY WITH DEPRESSION

E.K. Dakin, *School of Social Work, Colorado State University, Fort Collins, Colorado*

One advantage of qualitative research is its ability to elicit valuable data beyond the original, intended area of inquiry. This qualitative study examined the treatment experiences of participants in a 12-week course of psychotherapy as part of an NIMH-funded randomized clinical trial (RCT) comparing Problem Solving Therapy (PST) to Supportive Therapy (ST) for depressed older adults with mild cognitive impairment. In addition to the intended purpose of evaluating the research participants' therapy experiences, this study also revealed meaningful information about ways that their experiences as research subjects in an RCT had impacted their depression. Semi-structured individual qualitative interviews were conducted with 22 older adults with depression and mild cognitive impairment who had participated in the RCT. Individual qualitative interviews elicited participant perspectives about various aspects of their treatment experiences (e.g., expectations regarding treatment, what was most and least helpful about treatment). Interviews were digitally recorded and transcribed, and a transcript analysis was conducted using the qualitative analysis software NVIVO. A useful finding was participants' indication that the research component of the study impacted their treatment experience in both positive and negative ways. For example, some participants found that quarterly neuropsychological assessments associated with the study contributed to a marked increase in depressive symptoms. Findings from this study urge the consideration of possible unintended clinical implications when planning geriatric mental health interventions research. The implications of research participation as a treatment effect in addition to the psychotherapy itself must be considered when translating new psychotherapies from research to community settings.

SESSION 1920 (SYMPOSIUM)

CONTEMPORARY APPROACHES TO BIOGERONTOLOGY: NEW INSIGHTS FROM ESPO RESEARCHERS

Chair: T.A. Vasilopoulos, *Center for Developmental and Health Genetics, Pennsylvania State University, University Park, Pennsylvania*

The aim of this symposium is to display the work of young and emerging researchers in the field of biogerontology. Biogerontology is a multifaceted field and is informed by many areas of biological research. This symposium will highlight research from the fields of genetics, physiology, endocrinology, biostatistics etc. and will discuss how these fields contribute to our understanding of the biological mechanisms of aging. Within these fields, the presenters will also discuss the use of humans, rodents and other models in studying the biology of aging. This symposium intends to not only address how these approaches can be utilized to study the biology of aging but will also argue the importance of these biological mechanisms in the understanding and improvement of healthspan in our global aging population.

COMMON GENETIC FACTOR UNDERLIES PHYSICAL AND COGNITIVE FUNCTION

T.A. Vasilopoulos¹, G. Vogler¹, G.E. McClearn^{1,2}, B. Johansson^{3,1}, S. Berg^{2,1}, *1. Center for Developmental and Health Genetics, Pennsylvania State University, University Park, Pennsylvania, 2. Jonkoping University, Jonkoping, Sweden, 3. University of Gothenburg, Gothenburg, Sweden*

The "common-cause" hypothesis postulates that a common factor underlies age-related variance of both cognitive and non-cognitive phenotypes. However, few studies have surveyed how genetic and environmental factors contribute to this "common-cause." A common-path-

way model was fit to data from the OCTO-Twin study (twins 80+ years) to assess how genetic and environmental factors influence the variation of several biomarkers of aging (blood pressure, grip strength, pulmonary function) and cognition (verbal, spatial, and memory ability) via a single latent factor. This latent factor explained a large portion of the variance for verbal (0.86 loading), spatial (0.85) and memory (0.86) abilities and for pulmonary function (0.56) and grip strength (0.67). Genetic factors accounted for 70% of variance in this latent factor, while environmental factors explained the remaining 30%. The results support the plausibility of a single factor, primarily influenced by genetic factors, underlying the variance of both non-cognitive and cognitive phenotypes.

HORMONAL CONTROL OF AGING AND DISEASE

M.E. Matzko, R.J. McCarter, *Penn State University, University Park, Pennsylvania*

Hormonal control of metabolism is relevant to both processes that extend lifespan (i.e. caloric restriction) and ones that maintain healthspan (i.e. prevention of cardiovascular disease, diabetes). Here we wish to examine contributions of metabolic hormones relevant to the anti-aging processes of caloric restriction and to processes responsible for the accelerated aging in obese men and women. We hypothesize that analysis of the metabolic profiles of these models will be informative regarding the underlying systems regulating health and disease. Mice transgenic for low-IGF-1 and heterogeneous stock mice were randomized to caloric restriction diets or its mimetics: ten-day 40% and 60% restrictions, or long term 40% and low-methionine diets. Human tissue from obese gastric-bypass patients was also analyzed. Our results indicate that ghrelin, IGF-1, insulin and glucose are differentially affected in these various models, and that ghrelin in particular may be important in coordinating the whole-body responses to states of altered metabolism.

SESSION 1925 (SYMPOSIUM)

AGE-RELATED CHANGES IN DECISION MAKING

Chair: J. Mikels, *Human Development, Cornell University, Ithaca, New York*

Social trends over the past few decades have provided remarkable increases in the choices afforded individuals when making decisions. These changes are especially pertinent to older individuals as they are increasingly faced with complex healthcare and financial decisions. Although research and theory have traditionally focused on the cognitive components of the decision process, recent research and theory have underscored the important contributions of emotional factors to decisions. The consideration of cognitive and emotional components in the decision process is highly relevant across the adult life span given divergent age-related changes in these component processes. In particular, age-related declines in deliberative processes and age-related gains in emotional processes have critical implications regarding decision making and how older adults approach complex decisions. For instance, evidence suggests that when older individuals make decisions, they consider and seek less information and prefer smaller choice sets. The underlying psychological and neural mechanisms for these changes remain opaque, as do the consequences. In this symposium, we will explore age-related changes in decision making, the underlying psychological and neural mechanisms, how such changes may impact the quality of decisions, and potential ways to improve the decisions of older adults.

MECHANISMS UNDERLYING AGE DIFFERENCES IN FINANCIAL DECISION MAKING: EVIDENCE FROM FUNCTIONAL NEUROIMAGING AND BEHAVIORAL TASK MANIPULATIONS

G.R. Samanez-Larkin, *Psychology, Stanford University, Stanford, California*

As human life expectancy continues to rise, the financial decisions of aging investors may have an increasing impact on the global economy. Two studies will be presented exploring the cognitive mechanisms underlying age differences in investment decisions. By combining a dynamic investment task with neuropsychological measures and functional neuroimaging, the first study indicates that an age-related increase in financial mistakes when choosing risky assets is partially mediated by a neuropsychological measure of cognitive flexibility, but fully mediated by a measure of variance in caudate function – a subcortical region implicated in guiding reward-based decisions. These findings identify a novel neural mechanism by which aging may bound rational choice in the realm of finance. In the second study, a series of task manipulations that modulate the influence of prefrontal and striatal neural systems successfully improve the financial decisions and confidence of older adults (equivalent to younger adults at baseline).

WHEN LESS IS ENOUGH: AGING, INFORMATION SEARCH, AND DECISION QUALITY IN CONSUMER CHOICE

R. Mata, L. Nunes, *University of Lisbon, Lisbon, Portugal*

A meta-analysis of age differences in pre-decisional information search ($N = 1363$) suggests aging is associated with a small but significant decrease in information search (Hedge's $g = .31$) and that heterogeneity in current findings is related to task characteristics, such as the amount of information available: The number of cues, but not other task or sample characteristics (i.e., age, gender), was strongly related to age differences in amount of information searched across studies ($r = .58$, $p = .02$). In addition, we estimated the consequences of limited information search for decision quality in real-world environments. Specifically, we simulated the use of different decision strategies in 140 consumer products (e.g., dishwashers, credit cards) under different search conditions (0-100% information available). The results suggest that the aging decision maker may afford to neglect information because this leads to small losses in accuracy. Thus, less may be enough for the aging consumer.

CHOICE ACROSS THE ADULT LIFE SPAN

J. Mikels, *Human Development, Cornell University, Ithaca, New York*

When we make decisions, from everyday selections of material goods to critical healthcare decisions, we are typically confronted with a wide array of options. Although research findings support numerous benefits of moderate levels of choice, evidence also suggests that increased choice may lead to decreased satisfaction. Critically, older and younger individuals may approach increased choice differently given age-related declines in deliberative processes coupled with age-related motivational shifts toward emotional regulation. The current project explored age-related changes in choice preference and valuation. In a series of studies, the number of options that older and younger adults prefer, the value that they place on increased choice, and cognitive and emotional correlates were examined. It was found that older adults prefer fewer options and place lower value on increased choice relative to their younger counterparts. The cognitive and emotional correlates will also be discussed to better understand these age-related changes.

SESSION 1930 (SYMPOSIUM)

CHRONIC DISEASE, HEALTH BEHAVIORS AND HEALTH OUTCOMES FROM THE SEATTLE LONGITUDINAL STUDY

Chair: J. Blaskewicz Boron, Psychology, Youngstown State University, Youngstown, Ohio

Discussant: A. O'Hanlon, University of New Orleans, New Orleans, Louisiana

The Seattle Longitudinal Study (SLS), begun by K. Warner Schaie in 1956, has become one of the most influential studies of adult intellectual development over the last 50 years. Utilizing a longitudinal sequential design (Schaie, 2005), the SLS samples participants from a health maintenance organization in the Pacific Northwest every 7 years (1956, 1963, 1970, 1977, 1984, 1991, 1998, and 2005). Most publications using SLS data have focused on intellectual change across adulthood; however, the study is multidisciplinary in measurement scope. The present symposium highlights the types of research questions revolving around chronic disease, health status, and health behaviors that can be addressed within the SLS. The first two papers incorporate chronic disease within the investigation of variability in cognition. Specifically Caskie and colleagues examine rate of change in executive functioning from midlife to old age, while including the impact of hypertension on rate of change. Revell and Schaie consider the relationships among Type 2 Diabetes, APOE-e4, dementia status, and level of cognitive ability. The third paper, by Zanjani and colleagues, explores the relationship between alcohol consumption and cognitive change. Finally, health is considered as an outcome variable by Ryan and colleagues who investigate the impact of personality and late life work experiences on objective and subjective health status. The discussion by O'Hanlon will highlight the advantages of examining multiple facets of health in a longitudinal sample to evaluate both specific and broad impacts on differential aspects of development (i.e., cognition, lifestyle, etc.).

HEALTH STATUS AS A PREDICTOR OF MIDLIFE AND LATER LIFE EXECUTIVE FUNCTIONING

G.I. Caskie¹, S.L. Willis², A. Carr¹, 1. *Education and Human Services, Lehigh University, Bethlehem, Pennsylvania*, 2. *University of Washington, Seattle, Washington*

Executive functioning has been shown to be related to increased risk of cognitive decline and possible dementia in old age. However, research has been limited on change in executive functioning in midlife and its relation to cognitive risk in old age or how an individual's health status, particularly the development of cardiovascular disease (e.g., Hoth et al., 2008), may influence the amount of change in executive functioning during midlife and later life. The association of midlife executive functioning and midlife hypertension to executive functioning in old age was examined with a subsample of Seattle Longitudinal Study participants assessed both in midlife and later life. Latent growth models indicated significant average change in executive functioning in both midlife and later life. Executive functioning at age 46 was positively related to rate of change in later life. Midlife hypertension in midlife shows a trend toward greater executive functioning declines in later life.

DEMENTIA STATUS RELATED TO PRESENCE OF TYPE 2 DIABETES, APOE-E4, AND NEUROCOGNITIVE FACTORS

A. Revell¹, K. Schaie², 1. *University of Massachusetts Dartmouth, Department of Psychology, North Dartmouth, Massachusetts*, 2. *University of Washington, Department of Psychiatry and Behavioral Sciences, Seattle, Washington*

Type 2 diabetes as a risk factor for cognitive impairment has been documented (e.g., Arvanitakis, Wilson, & Bennett, 2006), though the relationship to dementia and which cognitive domains are affected is less clear. In a sample of 450 community-dwelling older adults (mean age=72.21, SD age=7.92, range 59-93) from the Seattle Longitudinal Study (SLS), we investigated whether non-demented healthy older adults

(n=336) and questionable or impaired adults (n=114) showed significant mean level differences in memory recall, perceptual speed, and verbal reasoning factors, and further whether dementia status was associated with the presence of type 2 diabetes and apolipoprotein-epsilon 4 (APOE-e4). Full-information structural equation models in Mplus indicated that questionable or impaired individuals, who were more likely to have type 2 diabetes and APOE-e4, had significantly lower mean levels on perceptual speed and verbal reasoning factors. The model met criteria for acceptable fit (CFI=.93; RMSEA=.08) with significant indicators ($p < .05$).

TALK TITLE: THE IMPACT OF PERSONALITY FACETS AND LATE LIFE WORK EXPERIENCES ON HEALTH IN OLDER ADULTS

L. Ryan^{2,1}, J. Blaskewicz Boron³, K. Schaie⁴, S. Willis⁴, 1. *Institute for Social Research, University of Michigan, Ann Arbor, Michigan*, 2. *Institute for Social Research, Ann Arbor, Michigan*, 3. *Youngstown State University, Youngstown, Ohio*, 4. *University of Washington, Seattle, Washington*

Multilevel modeling was used to examine a combination of individual and environmental predictors of health status change in older adults. A sub-sample of individuals aged 60+ (N=272; Age: M(T1)=67.6; Education: M=15 years) from the Seattle Longitudinal Study was selected. All participants were working in 1991 and had 14-year (3-wave) longitudinal data (1991-2005). Fifty-two percent of women and 49% of men worked across all 3 waves. Decline in both objective health status (OHS) and subjective health status (SHS) occurred over 14 years. After controlling for age, education, gender, and SHS, higher level OHS was associated with continued employment; SHS significantly moderated the effects of age and work status on OHS. Higher levels of SHS were associated with continued employment, high facet-level conscientiousness (self-discipline), low facet-level neuroticism (self-consciousness), and a significant interaction between OHS and work status. The impact of personality on SHS, and potential long-term impacts on OHS will be discussed.

ALCOHOL CONSUMPTION AND COGNITIVE CHANGE IN MID TO LATE LIFE

F. Zanjani¹, S.L. Willis², K. Schaie², 1. *Gerontology, University of Kentucky, Lexington, Kentucky*, 2. *University of Washington, Seattle, Washington*

Alcohol consumption and cognitive change were examined in a subsample (N=404) of the Seattle Longitudinal Study (1993-1998). Mean age of the sample in 1993 was 64.39 years (SD=8.21; Range=51-91). Three age groups were created: Middle-aged(52%): 45-64 years; Young-old(36%): 65-74 years; Old-old(12%): 75+ years. Sixty-nine percent (n=276) presented with a Mental Health/Substance Abuse diagnosis. Cognitive change was examined for memory ability (5% declined, 8% improved), executive ability (4% declined, 4% improved), and psychomotor speed (9% declined, 9% improved). Individuals who declined significantly on executive ability or memory showed the greatest reduction in alcohol consumption. These individuals initially had the highest level of alcohol consumption. Results suggest that cognitive status may affect change in alcohol consumption, indicating a decrease in drinking among individuals that experience decline in memory and executive functioning. Although medical advances contribute to greater longevity, this does not equate to quality of life, particularly when cognitive decline is evident.

CHRONIC HEALTH

RELIGIOSITY AND DEPRESSION AMONG AFRICAN AMERICAN AND WHITE CANCER SURVIVORS

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This analysis examines the association of depression and religiosity among African American and White Cancer survivors who participated in the UAB Study of Aging, a study of 1000 community-dwelling adults aged 65 and older (50% African American, 50% male, and 54% rural). 177 persons had a non-skin cancer diagnosis history. Participants answered questions from the Duke Religiosity Scale and the Geriatric Depression Scale (GDS). Three components of religiosity included: Organizational (based on church attendance), non-organizational (based on private behaviors such as prayer), and intrinsic (based on level of agreement on three attitudinal statements: experiencing presence of the Divine, religious beliefs lying behind one's approach to life, and carrying religion into all other dealings in life) were examined. Mean age of cancer survivors was 75.9 (SD=5.9); 48% African American, 42% female, 47% rural. Mean GDS score was 2.4 with 14% having scores suggestive of depression. 65% reported attending church once a week or more (organizational); 81% reported prayer, meditation or Bible study more than once a week (non-organizational); and 76% reported "definitely true of me" for all attitudes (intrinsic). In a multiple linear regression model controlling for age, race, gender, and rural residence, lower church attendance and lower levels of intrinsic religiosity were independently associated with higher GDS scores ($p<.001$ and $p=.036$, respectively). There were no significant interactions between race and the measures of religiosity, suggesting that for both African Americans and Whites, higher levels of religiosity were associated with reduced depression.

TREATMENT DECISION MAKING AND INFORMATION PROCESSING IN OLDER CANCER PATIENTS

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Although a significant amount of research exists in terms of outcomes and satisfaction with lung cancer treatment decisions, very little has focused on how patients' process treatment related information when making decisions. The present study sought to fill this gap. Older lung cancer patients (N=45, aged 50-82) completed a decision task where they recommended a treatment for a hypothetical individual with lung cancer. They were presented with the characteristics (side effects, complications, survival rates, number of treatments, how administered, and patient's stamina) of six different treatment options (surgery, surgery and chemotherapy, surgery and chemoradiotherapy, radiation, radiation and chemotherapy, and palliative care) in table form. In order to track information processing, participants could only view one piece of information at a time. Repeated measures ANOVAs compared the amount of information considered about (a) each treatment and (b) each characteristic. Results revealed patients were most likely to consider survival rates and side effects and were least concerned with how the treatment was administered and the patient's ability to withstand the treatment. With respect to treatments, participants were least likely to explore palliative care, and were more likely to consider information about surgery than radiation. Based on the description provided about the hypothetical lung cancer patient and his ability to withstand treatment, the most appropriate treatment would have been surgery followed by chemotherapy; however, only 24.4% of the patients recommended this treatment. Findings have implications for how physicians commu-

nicate with patients and interventions aimed at helping patients make treatment decisions.

REACTING AND ADAPTING: CANCER SURVIVORSHIP IN VETERANS ACROSS THE LIFESPAN

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There is a nearly 50% lifetime risk of developing cancer, yet due to advances in detection and treatment, the overall death rate associated with cancer has declined. Therefore, cancer survivorship is an increasingly prevalent issue among the aging population. Cancer and its treatment are associated with long-term mental and physical side effects. There are now ten million cancer survivors in the U.S., including half a million veterans. 84% of cancer survivors in VHA are older than age 60. In a review of 4,991,231 veterans treated in fiscal year 2007, 11% were cancer survivors. The most common cancer types are prostate, skin (non melanoma), colorectal, bladder, and lung, although relative prevalence varies by age. This study interviewed 40 veterans who were cancer survivors, and found that more than half experienced the cancer diagnosis as a traumatic stressor and reported symptoms of cancer-related PTSD, which was associated with younger age and more intensive treatments. Many reported struggling with loss of pleasure, although 80-90% also reported perceptions of personal growth. Most expressed an interest in a post-cancer treatment "transition plan." While 50-67% stated they would go to their PCP first for treatment related symptoms such as fatigue and sexual dysfunction, 25% admitted reluctance to see doctors due to fear it would bring bad news. These findings suggest that a trauma focused model of cancer diagnosis and treatment may accurately capture many veterans' experiences. This new conceptualization is ripe for future research and may inform clinical care for cancer survivors.

USE OF A REGISTRY OF OLDER ADULT LATE-STAGE CANCER PATIENTS AND THEIR CAREGIVERS: BARRIERS TO DATA COLLECTION

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While older adult cancer patients are now living longer than ever due to sophisticated treatment methods, little research exists on the psychosocial experiences of these patients and their caregivers. The collection of this type of information, through the creation of patient and caregiver registries, allows for both the storage of a broad range of psychosocial data and the creation of longitudinal data sets. The current study seeks to explore the difficulty of re-contacting members of such a registry for additional data collection. Attempts were made to re-contact 128 dyads within a larger registry comprised of older adult, end-stage cancer patients and their caregivers approximately one year after original registry participation. Of this group, 58% of dyads were reached, 25% returned consent forms, and 16% completed study participation. Additionally, at the time of re-contacting, 13% of the original 128 patients were reported to have died, and 19% of patient and caregiver phone numbers had been disconnected. Although the concept of a registry is excellent in theory, this study demonstrates the difficulties inherent in re-contacting a population that is prone to high rates of attrition. Additionally, the current study was completed via mail. Future studies attempting to re-contact patients and caregivers from registry databases might consider collecting additional data in person while patients are completing treatment at hospitals. This would serve to complete the consent and questionnaire process in a timely manner as well as providing an opportunity for participants to clarify any questions they might have about study procedures.

RACIAL DIFFERENCES IN HEALTH MAINTENANCE APPROACHES OF OLDER ADULT SURVIVORS OF CANCER

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This study examines racial differences in self- and medical health maintenance activities among cancer survivors. It specifically explores the role that education, health, and health beliefs play as mediators. This research examines data from an NCI (#R01-CA-78975) funded study. Data were collected from a randomly selected tumor registry of older adult, long-term survivors of cancer. Analysis of variance and OLS regressions were employed for data analyses. Findings reveal that African American and white cancer survivors differ in types of activities (i.e. exercise, rest, medical involvement) they use for health maintenance. However, even greater differences are seen across levels of education, within racial groups. Regression model comparisons show that education is a relatively strong predictor of self- and medical health maintenance indicators for blacks ($\beta = .29$ and $.34$, respectively) and whites ($\beta = .14$ and $.23$, respectively). Yet, race helps to explain a disparity in medical health maintenance. African American cancer survivors are less involved in medical decision-making when compared to their white counterparts ($\beta = -.19$). In contrast, race does not significantly explain involvement in self health maintenance activities. Medical skepticism, a health belief measure, significantly predicts self health maintenance, but does not differ by race. Differences were found in predictors of health factors by race. Findings of distinctions across levels of education, a proxy for socioeconomic status, may be a more powerful predictor than race in understanding health maintenance use among cancer survivors. This has implications for clinicians and practitioners treating minority and less educated older adults.

MENTAL HEALTH OF MIDLIFE ADULTS WITH CANCER: THE ROLE OF LEISURE, RELIGION, AND COMMUNITY

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Research has documented the multiple challenges among those diagnosed with cancer, including issues related to their mental health. However, little is known about how involvement in community activities can influence the well-being of these adults during midlife. Using data from the second National Survey of Midlife Development in the United States (MIDUS II; $N = 657$), this study investigates the impact of leisure involvement, religiosity, and sense of community (SOC) on cancer survivors positive and negative affect. A measurement of respondents' participation in formal leisure activities (e.g., attending sports and social groups) and cognitive leisure activities (e.g., reading, attending lectures) was created. Religiosity was assessed using a 9-item scale ($\alpha = .93$), and sense of community was measured using a 12-item scale ($\alpha = .84$). Regression analyses were conducted to examine these relationships and indicate that as age, SOC, cognitive leisure activities, and religiosity increased, positive affect also increased while education was negatively associated with positive affect. Increasing age, being male, better health status and greater perceptions of SOC were significantly associated with less negative affect in this sample. These findings suggest that certain forms of community support and involvement may promote the mental health of adults with cancer.

PREDICTORS OF THE USE OF COMPLEMENTARY AND ALTERNATIVE THERAPIES BY OLDER ADULT CANCER SURVIVORS

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The characteristics of those who utilize complementary and alternative medicines (CAMs) as an approach to disease management are ambiguous (Willison et al. 2005). Nevertheless, the interest in the use of these practices for cancer patients is steadily growing and has been associated with well-being and quality of life. This research examines

the factors that predict the use of CAMs among older adult cancer survivors. Data from an NCI funded (#R01-CA-78975) study using a random tumor registry sample of 321 older-adult, long-term survivors of breast, colorectal and prostate cancer are used. OLS regression was used to examine a multivariate model of the usage of CAM practices. Fifty-one percent of respondents reported using one or more forms of CAMs during treatment. The most prominent were meditation, visualization, special diets or vitamins, and use of herbs or teas. The strongest correlates of the use of CAM practices were current symptoms attributed to cancer ($\beta = .21$), medical skepticism ($\beta = .17$), and optimism ($\beta = .13$). These factors along with the demographic and other health measures explained 17% of the variance. The use of CAM practices is not linked to psycho-social well-being. Individual dispositional factors played a major role in the total number of CAM practices utilized. However, the best predictors were current cancer-related factors. Other health problems were unimportant, suggesting that CAM practices were derived solely from cancer issues. These data can be helpful to practitioners as they identify which among their clients are most likely to employ CAM practices.

GENDER DIFFERENCES IN POSTTRAUMATIC STRESS AND GROWTH IN ELDERLY CANCER PATIENTS AND CAREGIVERS

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Following trauma, women are more likely than men to exhibit symptoms of posttraumatic stress (PTS), including avoidance, hyperarousal, and intrusive thoughts. Furthermore, cancer survivorship is associated with increased symptoms of PTS, particularly hyperarousal. The present exploratory study examined the effects of advanced-stage cancer on the PTS and posttraumatic growth (PTG) of older adult cancer patients and their spouse or partner caregivers. Both patients and spouse or partner caregivers completed measures on the impact of traumatic events and PTG ($N = 42$). In cancer patients, women experienced significantly more symptoms of intrusion ($t(15) = 2.1$, $p = .05$), avoidance ($t(17) = 2.3$, $p < .05$), and hyperarousal ($t(17) = 2.4$, $p < .05$) than men. The magnitudes of these differences were large ($\eta^2 = .2$, $.3$, and $.2$ respectively). There were no differences in these symptoms across gender for caregivers. Also, there was a trend for women (both patients and caregivers) to report more PTG in regard to the cancer experience than men ($t(32) = 1.8$, $p = .08$). The magnitude of this difference was moderate ($\eta^2 = .09$). These findings are consistent with prior research on gender differences in PTS and the PTG model proposed by Tedeschi and Calhoun (2004) which suggests that PTG is a result of changes in cognitive schemas after processing intrusive ruminations using self-disclosure and social support. Therefore, increased PTG may be a result of coping with increased PTS. Future research should investigate differences in coping by gender with a larger sample of older adults.

NEW EVIDENCE ON THE RACIAL DISPARITY IN ELDERLY CARDIOVASCULAR HEALTH AND THE ROLE OF PHARMACEUTICALS

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Background. Since racial disparity in healthcare may contribute to racial health disparity, we postulate that the health benefits of newer cardiovascular pharmaceuticals in the late-1990s are shared by all elders, with blacks possibly obtaining greater benefits than whites. Pharmaceuticals present unique advantages as a modality of quality healthcare because they are uniform in the content, quantity, quality, and delivery. We sought to determine whether racial disparity in elderly cardiovascular health narrowed since the late 1990s, and whether this change was partly attributable to innovations in cardiovascular pharmaceuticals. Methods. We used data from the Health and Retirement Study (1994-2004) focusing on men aged 65-85 with outcomes of health status, vision, mobility, and disability. We used difference-in-difference method where

we compared the outcome of black elders with and without cardiovascular disease before and after the late 1990s, in contrast to the white counterparts. We assumed that those with cardiovascular disease were exposed to the potential benefits of cardiovascular pharmaceuticals, while those without were not. Results: We found that racial cardiovascular health gap narrowed substantially in the early 2000s in contrast to the late 1990s, evidently in a multitude of health outcomes—poor health, mobility, vision, and disability, after accounting for individual demographics. We found while co-morbidities, access to care, and economic resources were important contemporaneous correlates of health, these factors did not explain the narrowed gap, but the receipt of cardiovascular pharmaceuticals did. Conclusion: Racial cardiovascular health disparity among older adult men declined, and cardiovascular pharmaceuticals appeared to be a contributing factor.

I KNOW THAT IT'S SOMETHING THAT IS HARD TO SEE: PERCEPTIONS OF HEART DISEASE AND RISK FACTORS IN THE RURAL SAN LUIS VALLEY OF COLORADO

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Cardiovascular disease is the leading cause of adult mortality and morbidity in the United States, with disparate burdens in underserved populations. Hispanic women tend to exhibit the heart health status of Caucasian women 10 years older. The 6-member Prevention Research Centers Cardiovascular Health Intervention Research and Translation Network (PRC CHIRTN) conducted formative research to increase understanding of knowledge and perceptions of disease, risk, and prevention in their underserved partner communities. In the University of Colorado's partner community—the rural, low income, biethnic (47% Hispanic, primarily descendants of early settlers) San Luis Valley (SLV) in south central Colorado—we conducted four focus groups and one photovoice group among adult women (27 women, 60% Hispanic). Participants defined heart disease as a heart attack, stroke or a blockage and displayed a fear especially of stroke. "It would be very easy for me to develop [heart disease] because I don't change my lifestyle." Commonly mentioned risk factors included overweight/obesity, insufficient exercise, poor diet, stress, and diabetes. "I would picture the overweight beefy faced white man that is what I picture. Either a stroke or heart attack on the way. Because of their weight, probably high cholesterol, under exercised, over stressed." Participants had knowledge of prevention practices; however, they primarily attributed their poor lifestyle choices to a lack of motivation. "A huge clue is you have to be motivated to do it." Programmatic suggestions in these rural communities included the use of small local groups sharing practical advice.

THE CHANGING FACE OF HEART FAILURE: A NEEDS-DRIVEN PALLIATIVE CARE MODEL FOR ADVANCED HEART FAILURE

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Background: As medical, surgical, and interventional strategies for cardiac diseases improve, the numbers of people living with heart failure is increasing. While the typical heart failure trajectory includes a risk of sudden cardiac death that is six to nine times the rate of the general population, most heart failure patients experience a slow, chronic deterioration that is interrupted by acute episodes of exacerbation and hospitalization. While health professionals agree that there is a need for palliative care for heart failure patients and families, inconsistencies remain in the timing and scope of these services. Because of the unpredictable nature of heart failure, it has been difficult to establish prognostic indicators that would trigger a palliative care referral. Consequently, palliative care needs often go unanswered. Objective: The

purpose of this presentation is to describe the experience of living with heart failure to better understand the palliative care needs of older patients and their spouses. Methods: A grounded theory study of 20 older couples living with advanced heart failure was conducted. Couples were individually interviewed over the course of 12-15 months to explore changing needs as they traverse the heart failure trajectory. Findings: Interviews revealed an urgency for interventions for physical, emotional, and psychosocial needs in tandem with life-saving cardiac care. Conclusions: All of these needs could be addressed through a palliative care model that is needs-driven in response to the heart failure trajectory. A new model for palliative care that addresses needs from the time of diagnosis until death is presented.

OLDER BLACK AND WHITE WOMEN'S CARDIAC RISK PERCEPTIONS

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Background: Risk factors for coronary heart disease (CHD) are at epidemic proportions among older women, yet women seldom perceive risk for heart disease. Reasons for lack of understanding regarding risk are unclear and not well established. Purposes were to: 1) Explore older women's perceived CHD risk to identify factors that influence beliefs, 2) Compare factors per race. Methods: A descriptive, naturalistic qualitative study using a semi-structured interview guide elicited in-depth, narrative data which was recorded and transcribed verbatim. Participants completed a demographic and medical questionnaire. Narrative data was analyzed using content analysis with constant comparison. Results: Twenty-four (n=9 Black; n=15 White), older (>60 years) women with CHD risk factors were recruited from a senior-health clinic. Participants had a mean of 4.42 risk factors, 80% with at least a high school education, and 33% impoverished. Mean perceived personal CHD risk was 1.95 (+ 1.57) on 0-7 scale. Preliminary qualitative analyses reveal five major factors that influenced risk perceptions: 1) Lack of awareness of women's CHD; 2) Limited understanding of CHD etiology; 3) Competing priorities, which emphasized gender-based caretaker roles; 4) Lack of healthcare provider influence for change; and 5) denial, transference and minimization of CHD. Racial differences in beliefs were found. Conclusions: Black and White older women perceived their risk for heart disease to be low. They had limited CHD awareness and knowledge with misunderstandings of the link between risk factors and heart disease. To be effective, tailored interventions for older women are needed that consider beliefs about CHD risk.

LEISURE-BASED PREDICTORS OF ARTHRITIS SELF-EFFICACY AMONG MIDDLE AGED AND OLDER ADULTS

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Research suggests that individuals with higher self-efficacy tend to report higher activity levels, and that involvement in physically active leisure programs enhances arthritis self-efficacy. Yet, the relationship between social cognitive aspects of leisure (e.g., self-regulation, outcome expectations, self-efficacy) among adults with arthritis is unclear. This study examined the relationship between leisure activity and self-efficacy among 102 adults with arthritis (mean age 73.6 years). Leisure was measured in two ways: a modified version of the Selective Optimization with Compensation (SOC) scale to assess adaptation and self-regulation of leisure activities and a 12-item measure of Leisure Outcome Expectations assessing perceived benefits of leisure involvement. Self-efficacy was measured using the Arthritis Self-Efficacy Scale. Regression analyses indicated that leisure outcome expectations and arthritis severity significantly predicted perceptions of arthritis self-efficacy. Our findings suggest that aspects of leisure may influence the self-efficacy of adults with arthritis, particularly through their potential benefits.

WHAT'S GOD GOT TO DO WITH IT? RELIGIOSITY AND RELIGIOUS COPING IN BLACK AND WHITE WOMEN WITH ARTHRITIS

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Religion often, but not always, has a salutary influence on health outcomes, particularly for Blacks. Compared to Whites, Blacks are more likely to utilize religion as a coping mechanism when faced with health problems. Using both illness-specific and general indicators of religious coping and religiosity, this study examines race differences between Black and White women with arthritis, and examines whether religiosity and religious coping are related to factors commonly associated with arthritis (i.e., pain, functional impairment, depression). Participants included 77 Black and 98 White women with arthritis (aged 45-90) who completed structured interviews assessing religiosity, religious coping, pain, functional impairment, and depression. Descriptive analyses examined race differences in study variables. Regression analyses examined associations of religious coping and religiosity with pain, functional impairment and depression in Whites and Blacks. Results indicated that Blacks were more likely to use religious coping and practices and had a greater sense of religious identity (e.g., how religious would you say you are) than Whites. Yet, in examining the relevance of religion in the context of arthritis, the non-significant results may be most telling. None of the religion indicators were associated with pain, functional impairment, or depression for Whites, or surprisingly for Blacks. Findings suggest that while religion may be beneficial to health outcomes in general, it may not transcend to outcomes specifically associated with arthritis. Considering that arthritis is often considered a normal part of aging, it may not be a condition where one feels it necessary to bother God, even for Blacks.

AGE AND RACIAL DIFFERENCES IN RADIATION THERAPY FOR BREAST CANCER AND ITS IMPACT ON SURVIVAL

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Objective Research suggests that radiation therapy reduces breast cancer recurrence. Studies have shown that age and race impact receipt of radiotherapy. The objective of this study was to explore age and racial differences in the receipt of radiotherapy among women with a first breast cancer diagnosis and determine the impact of receipt of this treatment on survival. Methods The most recent SEER-Medicare data (1999-2005) were used for this analysis. The study cohort included women age 65 and over with a first breast cancer diagnosis. Descriptive statistics were generated and multivariate logistic regression analyses performed to explore differences in receipt of radiation among groups (younger vs older women; whites, blacks, Hispanics) and to determine the impact of its receipt on survival. Results Of 145,710 women in the study cohort, 86% were white, 7% were black, and 2% were Hispanic. Analyses showed that receipt of radiation therapy decreased with increasing age; younger women were almost twice as likely as older women (age 75 and over) to receive treatment, controlling for cancer stage (OR=1.77; 95% CI=1.73-1.80). Whites were somewhat more likely to receive radiation therapy than blacks or Hispanics (OR= 1.09; 95% CI=1.04-1.15). Women in all groups who received radiation treatment were more likely to survive longer (HR=1.06; 95% CI=1.05-1.07). Discussion Results of this study substantiated previous studies showing that advanced age and race were risk factors for omission of radiation therapy. Findings suggest that improvement in treatment of vulnerable populations across the continuum of care for breast cancer is still needed.

DIABETES AND PHYSICAL FUNCTION IN THE HANDLS STUDY

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Diabetes has been shown to predict decreased lower extremity function in adults. However, little is known about the association between diabetes and upper extremity function. We examined the potential interactive relations of diabetes and age, poverty, and race to upper and lower extremity outcomes in 1405 community-dwelling adults [mean age = 48(9.41), 43% male] derived from the baseline assessment of the Healthy Aging in Neighborhoods of Diversity across the Life Span (HANDLS) study. Exclusions were HIV/AIDS, neurological diseases, cardiovascular and cerebrovascular diseases, hand surgery, and arthritis. Participants performed lower extremity tests of side by side, semi-tandem, tandem, single leg stand, and number of repeated chairs tests, and upper extremity tests of right and left hand grip strength. Diabetes was defined by a fasting blood glucose sample (≥ 126) and self-reported history of diabetes diagnosis. Multiple regression analyses examined interactive relations of diabetes and age, poverty, and race to each physical function endpoint. Results revealed significant interactive relations of diabetes and race to right and left hand grip strength only (p 's $< .05$) such that African Americans with diabetes displayed greater grip strength. These findings contradict prior literature that has reported lesser grip strength among those with diabetes. However, African Americans have previously been shown to have greater average grip strength than Whites. Results may be further clarified by examination of possible higher order interactions of race and diabetes with other sociodemographic factors.

INCREASED SURVIVAL AMONG PEOPLE WITH MULTIPLE HEALTH PROBLEMS – A CHALLENGE FOR CARE PROVISION

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Health trends among the oldest old are necessary to describe living conditions of the oldest old as well as to estimate future needs for eldercare. Most studies have focused on specific conditions one at a time and different indicators seem to follow different trends over time. Since health problems often exist simultaneously and are interrelated in late life, this study identified serious problems in three domains (diseases/symptoms, mobility, cognition/communication). Using two representative samples of the Swedish population aged 77+ (SWEOLD) we ask: How did the prevalence of persons having serious problems in no, one, and two/three domains (complex health problems) change between 1992 and 2002? How did the relation of complex health problems and mortality change during the same period? Results show that the prevalence of serious health problems in one domain as well as complex health problems increased significantly, from 19% to 26%. Controlled for age, gender, health and educational cohort differences, mortality decreased by 20% between 1992 and 2002. Men with complex problems accounted for most of this decrease. Thus the gender difference in mortality risk was almost eliminated among the most vulnerable adults. If this trend persists there are broad ramifications concerning resource needs and the need for collaboration between different providers of health care and social services. This is a particular challenge in Sweden with its policy that elderly people should remain in their own homes as long as possible.

APOE GENOTYPE AND LONGITUDINAL SERUM LIPIDS AND LIPOPROTEINS: AGE AND GENDER DIFFERENCES

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The APOE gene, encoding apolipoprotein E, plays a significant role in cholesterol metabolism and has been associated with a variety of health outcomes including cardiovascular disease and dementia. A recent meta-analysis suggested that the APOE genotype is associated with serum lipid levels with e2 carriers showing lower levels of total serum cholesterol and LDL-C levels and e4 carriers higher levels of these lipids compared to the intermediate values for those with the APOE e3e3 genotype. We extend prior research by considering APOE genotype and longitudinal serum lipids and lipoproteins in Swedish adults from the SATSA, OCTO-Twin and Gender twin studies. Applying a two-part spline growth model, results for men suggested that APOE genotype predicted level as well as longitudinal change for total serum cholesterol, apoA1, apoB, and triglycerides. For women, APOE genotype predicted level of total serum cholesterol and apoB but not longitudinal change. No association was observed for HDL in either males or females. Overall, relationships between APOE genotype and serum lipids and lipoproteins suggested that APOE e2 carriers demonstrate the lowest levels of total serum cholesterol and apoB and the highest apoA1 levels in contrast to APOE e4 carriers. For men, decline in total cholesterol occurred for APOE e2 carriers before 65 years whereas e4 carriers showed decline after age 65; moreover, the relative elevations in apoA1 levels for APOE e2 carriers dissipated after age 65. Triglycerides were elevated prior to 65 years in male APOE e2 and e4 carriers compared to those with APOE e3e3.

RETIREMENT AND CARDIAC HEALTH: A LONGITUDINAL, DYADIC ANALYSIS

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As the Baby Boom generation reaches retirement age, the impact of this transition for cardiac health has emerged as a critical area of gerontological research. Prior research has examined the health effects of retirement, finding it to predict worse physical health (Curl, 2007; Dave, Rashad, & Spasojevic, 2006). This study investigated the impact of self-defined retirement on trajectories of heart problems of older married couples over a 12-year period (1992-2004). The sample (N=3,148) consisted of White and Black couples where both spouses participated in the Health and Retirement Study. At least one spouse was age 51 to 61 in 1992, and both were at least 40 years old. Neither spouse was completely retired at baseline and at least one spouse was working full-time or part-time (and not self-employed). Neither spouse reported a history of heart problems at baseline and both spouses had to meet all sample criteria. In multilevel analyses, the average risk of heart problem increased over time. For wives, both retirement and not being in the labor force predicted an increased risk of heart problems, compared to those who were working. For both husbands and wives, the retirement of one's spouse lowered their own risk of heart problems. There was significant individual variability in the impact of retirement on heart problems for husbands, but not wives. These findings have implications for policy and practice aimed at reducing post-retirement cardiac health decline as well as for continuing research efforts.

CAREGIVER RELATIONSHIPS IN ADVANCED CANCER: IMPLICATIONS FOR RACE AND DISTRESS

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Objective: Advanced cancer afflicts the elderly more than any other group, and the burdens of caregiving fall heavily on African Americans and women. The psychological costs of caregiving are frequently high, with rates of depression and anxiety exceeding those of the general population. Drawing from the patient care literature, this study proposes that quality of relationship with key others involved in the patient's cancer care may serve as a buffer for caregiver distress. Relationships assessed included those between the caregiver and 1) family, 2) physician, and 3) patient. "Relationship" is conceptualized as including communication, conflict, and support. Method: Cross-sectional data were collected as part of an ongoing study of cancer support and communication. Data were collected via telephone interviews with 420 family caregivers of advanced cancer patients receiving care at two urban tertiary care cancer clinics in the Midwest. Depression and anxiety were measured with the 14-item Profile of Mood States. Results: Highly rated relationship quality for all three caregiver relationships, family ($p<.01$), patient ($p<.01$), and physician ($p<.001$) were associated with lower anxiety, but only two, family ($p<.01$) and physician ($p<.01$) were associated with lower depression. Race interacted with family and physician relationships, showing that a good physician relationship was more strongly associated with both lower depression and anxiety for whites, but a good family relationship was more strongly associated with lower depression and anxiety for African Americans. Conclusions: Relationship quality is an important buffer for caregiver distress, but not all relationships are equal for all groups of caregivers.

SESSION 1940 (POSTER)

COMMUNICATION

NARRATIVES OF SELF IN A HISPANIC BILINGUAL DIAGNOSED WITH DEMENTIA OF THE ALZHEIMER'S-TYPE (DAT)

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Literature on language and Dementia of the Alzheimer's-type (DAT) has traditionally focused on the neurological, cognitive, and functional declines and accompanying deficits. Emergent theories of self in dementia have shattered the notion that the person with DAT has no sense of self. Literature from a sociolinguistic perspective has shown that speakers diagnosed with DAT can display sense of self via the use of personal pronouns and personal references. This case study concerns the use of reported speech (RS – i.e., when a narrator quotes himself as speaker and as spoken about) in regard to the sense of self, and how RS is affected in one particular speaker. Methods: Narratives of a Hispanic bilingual diagnosed with DAT (BDAT) were collected and coded for RS, linguistic devices (e.g., adjectives, adverbs, choice of pronouns), and shifts in speaker roles (i.e., shift from narrator, character, interlocutor roles via change in verb tenses and pronouns). Results: Preliminary results of the case study indicate that (1) the BDAT decreases instances of RS, linguistic devices, and speaker roles when using his non-dominant language (English), and (2) the BDAT shows differential frequency of instances and levels of complexity of RS in both languages. Thus, DAT has a proportionally greater effect on RS in the non-dominant language (English) vs. the dominant language (Spanish). Discussion: The study suggests that although there are declines in linguistic devices, the BDAT continues exhibiting self-representations in both languages leading to a continued promotion of sense of self.

USING PERSON PERCEPTION SKILLS TO DISCERN EXEMPLARY AND ADEQUATE HOME CARE WORKERS

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This study tested the usefulness of a measure of interpersonal cognitive complexity for differentiating between home care workers who were exceptional versus adequate in providing care in person-centered ways to adults who were over 65 years of age, and disabled individuals living at home. Workers (N = 554) from five offices of an international home care organization were evaluated by the coordinators who referred them regarding their ability to provide care in individualized and personalized ways. The evaluation instrument consisted of 10 items related to person-centered behaviors identified and defined in previous research (Grosch, Medvene & Wolcott, 2008): e.g. "treats the client like a person". Across the five offices, the 60 workers scoring highest on the 10-item instrument were identified as exceptional- Group A - whereas those scoring lowest were considered adequate - Group B. Groups A and B were compared in terms of their ability to describe others in relatively complex ways, as measured by Crockett's Role Category Questionnaire (RCQ, Crockett, 1965). As hypothesized, workers in Group A had higher levels of interpersonal complexity than workers in Group B: M for Group A = 22.44 versus M for Group B = 17.98, $t(115) = 2.92$, $p < .01$. This study included a subsample (N = 30) of non-native English speaking workers. For this subsample, the hypothesis did not hold; however, RCQ scores were in the expected direction. The findings suggest that an individual difference - interpersonal cognitive complexity - may be useful in screening formal caregivers of the elderly.

USING A THINK-ALOUD TECHNIQUE TO EXAMINE THE FRAMING EFFECT AMONG YOUNGER AND OLDER ADULTS' MEDICAL DECISIONS

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Older and younger adults are susceptible to a decisional bias when faced with medical decisions. The framing of the information (e.g., likelihood of dying versus surviving), upon which the decision is to be made, can influence a treatment decision. Although this framing bias has been demonstrated in multiple studies, no published studies have attempted to determine the decisional process older and younger adults engage in when presented with different information frames. The current study used a think-aloud procedure to examine decisional process differences in younger and older adults who did and did not demonstrate a framing effect. All participants were presented with a survival (chances of surviving) and mortality (chances of dying) framed scenario. Data were analyzed quantitatively to determine the presence of a framing effect and qualitatively to determine decisional process differences. Among younger adult participants, 45 percent demonstrated a framing effect, compared to 27.5 percent of older adults. Qualitative analyses revealed that older adults who did not demonstrate the framing effect tended to rely more heavily on personal experience, while those demonstrating the framing effect relied more heavily on the presented data. Among both younger and older adults, those demonstrating a framing effect tended to rely more heavily on the presented data. Those demonstrating the framing effect were significantly more likely to reference the data than those not demonstrating the framing effect ($p < .01$). After attending this session, attendees will be familiar with the effects information framing on medical decision making among older and younger adults.

FOCUSED COMMUNICATION TRAINING FOR CAREGIVERS OF PERSONS WITH AD: LESSONS LEARNED FROM CLINICAL TRIAL RESEARCH

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Communication problems have been cited to be the most difficult issue for caregivers of persons with dementia (AD). The FOCUSED Training (Ripich, 1994), an educational intervention for caregivers, was developed to help caregivers deal with one-to-one communication breakdowns. This is a 7-step caregiver-training program can increase successful communication and decrease communication barriers in conversations between the caregiver and the person with AD. FOCUSED was implemented as an add-on to a larger clinical drug trial run by the Alzheimer's Disease Cooperative Study. The VN study was aimed at testing the efficacy of divalproex sodium to reduce behaviors symptoms associated with dementia. The training program was expected to help reduce variance and promote study adherence in the larger clinical trial. The pilot results suggest trends ($n=8$) in the Caregiver Hassles Scale, The Modified Positive and Negative Affect Scale, and a survey of knowledge about AD. Results of this paper also describe best practices and lessons learned from incorporating communication training into a larger clinical trial.

"OLD PEOPLE AREN'T GREEN!" AN ANALYSIS OF DISNEY'S OLDER CHARACTERS, THEIR INTERACTIONS, AND THEIR INFLUENCE ON AUDIENCES

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Research on media portrayals of older adults (e.g., children's literature, sitcoms, and magazines) has found older adults to be under-represented and/or negatively portrayed. Bell (1995) and Robinson, Calister, Magoffin, & Moore (2007) studied Disney portrayals, and this study extends this research by examining older characters, their interactions, and audience feedback. Twenty films were randomly selected from the "Disney canon," and the first project identified demographics for all speaking characters (N=460). Older adults (characters over 50 years of age) made up 23% of the sample. Of these older characters, 65.7% were male, 61% were white, and 42.9% were minor characters. In 10 movies, interactions were coded for elements such as cooperation, conflict, quality, context, patronizing speech, painful self-disclosures, interruptions, yelling, sarcasm, laughter, and power. Analyses reveal complicated relationships between type of contact (peer vs. intergenerational) and several interaction elements. Finally, focus groups were conducted: 1 group with teenagers, 2 groups with college students aged 18-28, and 1 group with adults aged 60 and older. Significant themes from these discussions include: Disney films are memorable and watched repeatedly; older characters were memorable only if they were main characters; portrayals influence other people but not me (Third Person Effect); older characters are diverse, as are real older adults; and age cues translate from interpersonal contexts to mediated contexts. Combining theoretically grounded content analysis with audience response increases our understanding of what these portrayals are and how they are perceived. The findings are discussed in terms of Intergenerational Contact Theory and Social Learning Theory.

TEXT COHESION AND READABILITY OF WRITTEN INFORMATION RELATED TO SENIOR HEALTH

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Text cohesion is the degree to which text content ties together. A cohesive text assists a reader to comprehend written information. However, text cohesion has never been measured in existing readability formulas, such as the Flesh Reading Ease index. To increase readability, particularly in current written health information for seniors, text cohesion might be an important factor in addition to existing readability formulas. This reported project was to examine 1) text cohesion of com-

mon written senior health information and 2) the correlation between text cohesion and the Flesh Reading Ease index. 200 short health texts were obtained from websites ($n=157$), brochures ($n=35$), and magazines ($n=5$). These texts were related to senior health in four domains: 1) medication knowledge, e.g. how to take or how to store medications; 2) disease knowledge, e.g., explanation of a disease and related symptoms; 3) treatment procedure, e.g., how a test is performed or how a disease is treated; and 4) health policy, e.g., Medicare. Coh-Metrix was used to analyze text cohesion among these texts. Factor analysis showed that referential cohesion and latent semantic index accounted for the most variance in text cohesion. There was no correlation between text cohesion and the Flesh Reading Ease index, $r = -.13$, $p = .055$. The result indicates that length of words and sentences (as measured by the Flesh Reading Ease index) is not related to text cohesion. Therefore, to increase readability of written health information for seniors, both factors must be considered.

COUPLES COMMUNICATION IN DEMENTIA: DEVELOPMENT OF AN IN-HOME INTERVENTION TO IMPROVE DYADIC COMMUNICATION IN CAREGIVERS AND THEIR DEMENTIA-DIAGNOSED PARTNERS

C.L. Williams, *Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, Florida*

As communication abilities decline, persons with dementia and their spouse caregivers are particularly vulnerable to communication breakdown. Misunderstandings, conflict and distress often characterize these relationships. The purpose of this pilot study was to examine the feasibility and acceptability of a communication intervention for dementia diagnosed couples. Spouses make up the largest group of dementia caregivers and have unique needs that should be addressed separately from other family caregivers. Interventions to facilitate positive relationships between dementia caregivers and their spouses diagnosed with dementia is an area of investigation in need of further development. A 10 week communication intervention was developed to improve dyadic communication. Couples received a program manual and were visited weekly for 10 weeks by a trained graduate student supervised by the investigator. Sessions included an 20 to 30 minutes of caregiver education and support, 10-15 minutes of supportive communication with care recipients and 10 minutes of dyadic communication in which the intervener supported caregivers to implement knowledge gained in the program. Couples were pre and posttested by an independent rater on marital satisfaction, caregiver burden and depression, care recipient depression, caregiver and care recipient verbal and nonverbal communication and caregiver knowledge about dementia. Qualitative methods were used to examine feasibility and acceptability of the intervention. Ultimately, this program of research will lead to the development of novel interventions to improve the quality of dyadic relationships in this vulnerable population.

A TOUCH OF HOME: ARTIFACTS OF PAST LIVES IN ASSISTED LIVING

R. Hrybyk, R. Rubinstein, *UMBC, Baltimore, Maryland*

The meaning of home and the impact of the environment on the aging self have been the focus of many studies. Chaudhury (2008) points out that "memories of home are a powerful means for sustaining our sense of self." Rubinstein (1989) suggests that "for older people, lives and environmental features are subjectively intertwined." The move from a home that often embodies life-long memories to a public-private room can disrupt one's sense of identity. A move to assisted living necessitates a downsizing of personal possessions as there is space for only a small number of mementos. These items often hold memories of loved ones or important events. Personal objects brought from home can preserve a sense of continuity with one's past. These treasures may create an important link for AL staff to communicate with elders in their care. This poster presents a content analysis of items in residents' rooms and

explores how these express the "self" to caregivers in assisted living. Methodology of the study combined content analysis of artifacts with ethnographic interviews of ten residents, the admissions coordinator, and a caregiver in a Mid-Atlantic assisted living facility. Using photographs of items as diverse as comfortable chairs to pictures of family members, this poster describes how artifacts of the past imbue a room in AL with a sense of home. This project is supported by the National Institute on Aging study, Stigma and the Cultural Context of Residential Settings for the Elderly, RO1 AG028469 (P.I. J. Kevin Eckert, Ph.D.)

INFORMATIONAL MEDIA PREFERENCES AMONG BABY BOOMERS AND OLDER ADULTS: FINDINGS FROM THE KENTUCKY ELDER READINESS INITIATIVE

F.B. Vorsky, G.D. Rowles, *University of Kentucky, Lexington, Kentucky*

This research sought to identify and compare media use preferences of Baby Boomers and older adults when seeking information on needed services. A survey developed as part of the Kentucky Elder Readiness Initiative included questions on the use of different media sources (newspaper, radio, television and internet) for learning about services, activities and local community events. The survey was mailed to 9,600 randomly selected households (640 in each of Kentucky's 15 Area Development Districts) in 2007. Statewide, 3,256 responses were received (33.9% response rate). Analyses differentiated among older adults (born before 1946) and Baby Boomers (born between 1946 and 1964). Results indicate high levels of reliance on newspapers (Baby Boomers 95.6%/older adults 94.8%) and television (Baby Boomers 94.7%/older adults 92.8%). Modest differences were apparent in the use of radio for information (Baby Boomers 92.7%/older adults 87.7%). Profound differences were found in the use of internet as a source of local information (Baby Boomers 80.7%/older adults 47.2%). The top quintile with respect to internet use was a cluster of three development districts including or adjacent to major metropolitan areas (Cincinnati, Louisville and Lexington). Education significantly affected use of the internet with only 52.4% of those with a high school diploma or less compared to 80.5% for those with some college or advanced degrees relying on this medium. The findings confirm the need for generation-related targeting of media choices by both advertisers and community services in their efforts to reach to reach older individuals.

SESSION 1945 (SYMPOSIUM)

GETTING TO KNOW THE NEIGHBORS: FRIENDSHIPS AMONG PEOPLE WITH DEMENTIA IN SPECIALIZED CARE UNITS

Chair: K. De Medeiros, *The Copper Ridge Institute, Sykesville, Maryland, The Johns Hopkins University School of Medicine, Baltimore, Maryland*

Discussant: S.R. Sabat, *Georgetown University, Washington, DC, District of Columbia*

People with dementia living in long-term care facilities are faced with many personal challenges, including forming new friendships, feeling "at home," and finding social activities that are personally interesting and cognitively stimulating. In addition, the ability to develop and maintain social relationships has been linked with positive psychological and health outcomes in this population. Although there is a body of work on relationships that people with dementia have with non-cognitively impaired people such as staff and family, there are few published studies that have explored sociability and friendships among residents themselves. This symposium presents a variety of findings from a current study on the social environments of a 20-bed residential unit of people with moderate to advanced dementia. Specifically, papers will address how friendship is operationalized, methods used to identify friendly and non-friendly interactions, and an ethnographic description of friends and non-friends in the study; a microanalysis of talk between friends and non-friends, including features of conversations among peo-

ple with moderate to advanced dementia; measures of cognitive, communicative and physical function and their role in predicting positive social outcomes; and the role of staff perceptions of residents and relationships in shaping the social milieu of the cognitively impaired. Having a better understanding of friendships that develop and are sustained in dementia care units, including how to foster better social interaction, has the potential to benefit residents in a variety of ways including increased quality of life and ability to maintain levels of function for longer periods of time.

RELATIONSHIP BETWEEN RESIDENTS' COGNITIVE AND COMMUNICATIVE ABILITIES AND STAFF PERCEPTIONS OF FRIENDSHIPS IN A DEMENTIA CARE ASSISTED LIVING SETTING

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The factors which contribute to the formation of friendships between people with dementia are still unknown. One possible factor is similarity of cognitive and communicative ability among residents. This was explored by utilizing qualitative and quantitative data of a study investigating these friendships. To describe resident relationships, staff rated how much resident A liked resident B on a scale of -3 to +3 for all 20 residents (Range(Means): 0.05-1.09). Staff also identified residents they thought were friends and explained why. Measures of cognitive (MMSE – Range: 0-18 & SIRS – Range: 4-22) and communicative ability (FLCI – Range: 7-82) were also used. We hypothesized that high likeability ratings would correspond to high cognitive and communicative abilities; low likeability with low abilities. While trends supported our hypothesis, relationships arose which suggested that ability alone does not predict friendship and that observed interactions may provide a better means of understanding friendships.

STAFF INTERACTIONS WITH RESIDENTS: COMMUNICATION STRATEGIES IN GROUP VERSUS INDIVIDUAL ENCOUNTERS

A. Mosby¹, K. De Medeiros^{1,2}, P. Saunders¹, P.J. Doyle¹, M.E. Jeresano¹, K. Van Haitsma¹, 1. *The Copper Ridge Institute, Sykesville, Maryland*, 2. *The Johns Hopkins University School of Medicine, Baltimore, Maryland*

Past research has shown that staff interactions with residents with dementia are a key component of socialization. Although there have been studies examining staff's role in the social world of long-term care environments, there have been few in depth explorations of the nature of these encounters. The purpose of this study was to examine how and when staff interacted with 20 residents in the context of general socialization (e.g., activities, meal times). Ethnographic observations were conducted for six months. Results revealed that activities' staff tended to focus their conversations on the residents' past, asking questions and providing opportunities for sharing memories while caregiving staff were more focused on immediate tasks at hand (e.g., finishing a meal). Interestingly, neither staff groups were likely to facilitate conversations between residents. This oversight may contribute to residents' dependence on staff for conversations. Further research is needed.

TOWARD DEFINING FRIENDSHIP IN COGNITIVELY IMPAIRED ADULTS: RETHINKING A FAMILIAR PARADIGM

K. De Medeiros^{1,2}, P. Saunders³, P.J. Doyle⁴, A. Mosby¹, K. Van Haitsma⁵, M.E. Jeresano⁶, 1. *The Copper Ridge Institute, Sykesville, Maryland*, 2. *The Johns Hopkins University School of Medicine, Baltimore, Maryland*, 3. *Georgetown University, Washington, D.C., District of Columbia*, 4. *The University of Maryland, Baltimore County, Baltimore, Maryland*, 5. *The Polisher Research Institute, Philadelphia, Pennsylvania*, 6. *Towson University, Towson, Maryland*

Although the term "friendship" may immediately invoke ideas about personal attributes or specific individuals in people without cognitive impairment, it can be more difficult to define in individuals with dementia. The question of what comprises friendships among people with dementia was the focus of our six-month observational study. Using a basic definition of "friendship" as including voluntary interaction, affective involvement, and a sense of commitment and reciprocity, we observed interactions among 20 residents and interviewed staff and residents about who were friends and why. Staff described "reminiscence" or participating in activities as a key component of resident friendships. However, from our ethnographic observations, we found that joint construction of the present (e.g., determining the year, the location, one's identity) between two or more people was a more common conversational theme among "friends." This insight adds an important and previously unreported dimension to the literature on social interaction.

TRANSITIONAL OBJECTS AS MEDIATORS OF COMMUNICATION IN MULTI-PARTY INTERACTIONS WITH DEMENTIA RESIDENTS IN LONG-TERM CARE

P. Saunders¹, K. De Medeiros^{2,3}, K. Van Haitsma⁴, A. Mosby², P.J. Doyle², M.E. Jeresano², 1. *GUMC, Washington, District of Columbia*, 2. *The Copper Ridge Research Institute, Sykesville, Maryland*, 3. *Johns Hopkins University, Baltimore, Maryland*, 4. *Polisher Research Institute, North Wales, Pennsylvania*

Much of the research on communication and dementia focuses on grammatical features (i.e., sentence length, complexity, forms of address) and topic (i.e., objects in the immediate context or distant past). Often this research excludes the role of the person with dementia as conversational partner in the communication process and avoids the complexity of multi-party conversation. This paper is based on data collected for the Friendship Study, which is an ethnographic study (n = 20 residents) of a long-term care facility for persons with moderate to severe dementia. Using an interactional sociolinguistic framework, which includes social factors such as power, space, and gender, this analysis examines linguistics elements to illustrate how the use of a toy animal promotes conversational interaction between staff and residents as well as between two residents. Findings show that residents and staff use indexicality, agency, coherence, and humor to facilitate and control/infantilize depending on the speaker/addressee.

SESSION 1950 (PAPER)

HOW SOCIAL NETWORKS INFLUENCE AGING

SUBJECTIVE SOCIAL STATUS AND HEALTH OF OLDER ADULTS IN MEXICO: DOES PLACE OF RESIDENCE MATTER?

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Objective: Subjective social status (SSS) is often used to explain social gradients in health. However, little research has focused on this factor in developing countries, particularly in Mexico. We explore regional differences (urban vs. rural) in the association between SSS and two health outcomes (global health and depressive symptoms) in a national sample from the 2003 wave of the Mexican Health and Aging Study (MHAS). Methods: The study included 5,543 Mexicans aged 52

and older from the MHAS. Half of respondents resided in urban Mexico. SSS was measured with the MacArthur Scale of Subjective Social Status. Health outcomes included a measure of global self-rated health and depressive symptoms using a modified version of the CES-D. Logistic regression models were used to explore the role of SSS in these health outcomes. Results: Thirty-six percent of older adults reported depressive symptoms and 68% reported poor/fair self-rated health. In rural areas, 42% reported depressive symptoms and 73% reported poor/fair self-rated health as compared to 30% and 62% in urban Mexico, respectively ($p < .001$). SSS was a consistent independent predictor of both depressive symptoms ($p < .001$) and poor/fair self-rated health ($p = .018$) in urban areas, whereas SSS was not significantly associated with these health outcomes in rural areas of Mexico. Implications: Findings suggest that health disparities in developing countries are not universally associated with SSS which is used in developed countries to demonstrate social gradients in health. Other factors such as social capital may be strongly associated with health disparities in rural regions of developing countries.

DEPRESSION AND SOCIAL NETWORKS IN COMMUNITY DWELLING ELDERS

F.E. Wilby, A. Barusch, *College of Social Work, University of Utah, Salt Lake City, Utah*

Social withdrawal and inadequate social support have been identified as correlates of depression in older adults, although the relationship between depression and social withdrawal is not universally accepted. The purpose of this study was to examine the social networks of both depressed and non depressed community dwelling elders to determine whether the depressed elders had fewer social contacts or less dense social networks than the non depressed participants. This study was conducted to describe social networks from the perspectives of older adults living in the community. The sample consisted of 91 randomly selected respondents. 25 respondents reported significant levels of depressive symptomatology as measured by the CES-D. All 91 completed in-depth interviews which included questions about the family members and other social contacts they had during the past week. All 91 of the sample reported having had social contacts with family and friends during the past week. Further analysis showed that depressed and non depressed individuals had very similar breadth of social contacts with spouses, grandchildren and family in general, although the depressed group mentioned sons and daughters less frequently. Additionally, the depressed group did report less involvement in volunteer work or civic engagement than did the non depressed group. The results suggest that the depressed group was not socially isolated or withdrawn but that the types of contacts they had differed from the non depressed group.

SOCIAL ISOLATION AMONG RECIPIENTS OF HOME-DELIVERED MEALS IN A MAJOR URBAN AREA

E. Wethington, *Human Development, Cornell University, Ithaca, New York*

Although home-delivered meals programs have existed for many years, relatively little is known about the social characteristics and networks of recipients, or the relationship of social support and network characteristics to physical functionality and well-being in this vulnerable population. The Cornell Institute for Translational Research on Aging (an Edward R. Roybal Center) and community partners conducted a random telephone survey with 1505 New York City recipients of home-delivered meals in 2004-2005. The study assessed social characteristics, health, formal service use, and evaluation of meals services. The sample was ethnically diverse (29% Black, 11% Hispanic, 1% Asian); 68% were age 80 or older and 12% were age 90+. Most recipients were at risk of social isolation, with 73% living alone and 67% widowed. The extent and frequency of interactions with children, other family members, neighbors and friends widely varied. Although one-third of the recipients reported frequent interaction and social activity, one-quarter

of the recipients reported a weak or nonexistent social interaction network, indicating social isolation. Among those classified as having multiple risk factors for social isolation, 27% reported being childless, 43% reported seeing children rarely or never, 51% had no relatives in the city, 48% reported no helpful neighbors, and 16% had no one to talk to if needed. Two percent spoke to no one but the meals delivery person on a daily basis. Larger social networks were strongly related to better mental health. The implications of these findings for the implementation of meals programs will be discussed.

SYMBOLIC BOUNDARY WORK AND FRIENDSHIPS AMONG RESIDENTS OF A PROGRESSIVE CARE RETIREMENT COMMUNITY

J. Harrison-Rexrode, *Virginia Tech, Blacksburg, Virginia*

In this study I explore the boundary work processes used by older adults, living in a progressive care retirement community, to decide who might be desirable and undesirable friends among other residents. Accounts of moral, cultural, and socioeconomic boundaries as mechanisms for including and excluding others as potential friends were collected using a combination of quantitative surveys and qualitative interviews from residents (age 65+) of a rural comprehensive retirement community in the United States. First, a survey designed to explore symbolic boundaries as well as structural and social aspects of friendships was distributed to approximately 350 residents of a comprehensive retirement community. Second, in-depth interviews of a sub-sample of 20 residents were collected in order to examine older adults' narratives regarding the role of symbolic boundaries in developing and maintaining friendships within the retirement community. Findings from this study enrich our understanding of how symbolic boundary use varies by group and context, as well as make theoretical contributions to the literature on symbolic boundaries by exploring the ways in which aging may alter the use of boundaries.

THE IMPACT OF SOCIAL NORMS ON RELATIONSHIPS OF OLDER MIGRANTS: RECIPROCITY AND EMOTIONAL CLOSENESS

V. Burholt, C. Dobbs, *Centre for Innovative Ageing, Swansea University, Swansea, United Kingdom*

There exists a wealth of research on care-giving to older people. However, there is relatively little data on the impact of reciprocity or non-reciprocity on the emotional well-being of older care-recipients. Research in the United Kingdom has found that, over time, increased support from adult children to parents decreased the emotional closeness of the parent to the child (Burholt & Wenger 1998). The authors speculate that this result is because uni-directional or non-reciprocated help is contrary to the mainstream British norms of independence. In other countries, where the expectation is to receive help from adult children in later life (Burholt et al. 2003), one may hypothesise that this relationship would be reversed, that is uni-directional help from adult children to parents would increase emotional closeness. With these structural determinants in mind, this paper seeks to explore the relationships between reciprocal help and emotional closeness in two different societies. The sample ($N = 603$, age = 55+) comprised Indian Gujaratis and Punjabis, and Bangladeshi Sylhetis living in the United Kingdom (i.e. migrant groups) or in the country of origin (i.e. non-migrant groups), where the number of participants was equally distributed across gender, ethnic group and country of residence. This research tests whether South Asian migrant carers have adopted the norms and values surrounding caring in the host society, or whether they maintain the values from the country of origin.

SESSION 1955 (SYMPOSIUM)

LOWER YOUR RISK OF COGNITIVE IMPAIRMENT? OPINIONS AND PRACTICES OF PRIMARY CARE PRACTITIONERS

Chair: R. Hunter, UNC Center for Aging and Health, Chapel Hill, North Carolina

Discussant: A. Caprio, UNC Division of Geriatric Medicine, Chapel Hill, North Carolina

Patients look to primary care practitioners for assessment and advice about maintaining health and preventing or delaying disease or disability. While patients view maintenance of cognitive function and prevention or delay of dementia as very important goals, relatively little is known about primary care practitioners' opinions and practices related to patients' cognitive health. This symposium will share research findings from focus groups and individual interviews conducted in three states by the Centers for Disease Control and Prevention's Healthy Aging Research Network to identify the current opinions and practices of primary care physicians, nurse practitioners and physician assistants. It will describe relevant recommendations and messages given to patients and identify perceived barriers to discussing brain health. Other findings to be presented are based on questions from the Porter-Novelli's 2008 DocStyles survey, with 1,000 primary care physician respondents, pertaining to their risk reduction communication with patients. In addition, the session will explore strategies used by primary care practitioners to keep current with evidence on cognitive health and the consequent implications for continuing education and other avenues for sharing evidence on cognitive health and/or prevention of dementia with medical practitioners. Implications for research, practice and training will be discussed.

PHYSICIAN OPINIONS AND PRACTICES FOR REDUCING RISKS OF COGNITIVE IMPAIRMENT: FOCUS GROUP RESULTS

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Primary care physicians play a pivotal role in educating patients about management of health risks; however, little is known about physicians' opinions and practices regarding reduction of risk for cognitive impairment. A series of focus groups and individual interviews were conducted with 28 primary care physicians in three states by the Centers for Disease Control and Prevention's Healthy Aging Research Network. Results indicate that physicians do not view the evidence for prevention or delay of cognitive impairment or dementia as sufficiently compelling to integrate into patient counseling. However, they do offer recommendations that are supportive of brain health in the context of discussing other conditions. Reduction of risk for cognitive impairment is typically discussed directly only if prompted by a patient or family member. Other significant barriers to broader discussion of cognitive health are lack of time and the perception that other health issues are of relatively greater importance.

"YOU GIVE THEM ENOUGH TIME TO TALK A LITTLE BIT": MID-LEVEL PRACTITIONER FOCUS GROUP RESULTS

L.L. Bryant¹, A. Hochhalter², R. Hunter³, J. Sharkey⁴, D.B. Friedman⁵, R. Liu⁵, A.E. Mathews⁶, 1. Colorado School of Public Health, University of Colorado Denver, Aurora, Colorado, 2. Scott & White/Texas A&M Health Science Center, College Station, Texas, 3. Center for Aging and Health, University of North Carolina School of Medicine, Chapel Hill, North Carolina, 4. School of Rural Public Health, Texas A&M Health Science Center, College Station, Texas, 5. Arnold School of Public Health, University of South Carolina, Columbia, South Carolina, 6. University of South Carolina, Columbia, South Carolina

Mid-level practitioners – nurse-practitioners and physician's assistants – educate patients about healthy behaviors and management of health risks, but we know little about how they perceive and promote reduction of risk for cognitive impairment. Focus groups and individual interviews with 21 mid-level practitioners in three states by the Prevention Research Centers Healthy Aging Research Network found that, as with physicians, these providers do not regularly discuss brain health with older patients unless faced with obvious debility or family concerns. They do, however, encourage their patients to talk about "how they are doing," and if warranted, they follow up with mental status testing and recommendations for medications and physical and mental activity. They further express concern about the extent to which stigma and fear of dependence create barriers to addressing dementia and its common partner depression in both demented patients and their caregivers. These practitioners welcome continuing medical education in these areas.

PHYSICIAN BELIEFS AND PRACTICES FOR REDUCING RISKS OF COGNITIVE IMPAIRMENT: A LARGE NATIONAL SURVEY

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Evidence increasingly suggests that healthy behaviors and management of vascular risks may help maintain cognitive health. Physicians educate patients about healthy behaviors and manage health risks. Yet little is known about physicians' beliefs and practices regarding risks for cognitive impairment. Five questions on physicians' risk reduction communication with patients were developed by the Centers for Disease Control and Prevention's Healthy Aging Program and Healthy Aging Research Network, and included in Porter-Novelli's 2008 DocStyles survey, with 1,000 primary care physician (PCP) respondents. 75% of PCPs said they discussed concerns about cognitive impairment with patients without dementia. Most PCPs (83%) said scientific evidence on reducing risk of cognitive impairment was moderate or weak. The majority reported advising patients to reduce their risk of cognitive impairment, with 92% recommending physical activity and 85% recommending intellectual stimulation. In this study, further analyses will be conducted on physicians' perceptions about the evidence and their recommendations.

PRIMARY CARE PROVIDERS' SOURCES AND PREFERENCES FOR COGNITIVE HEALTH INFORMATION

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Many older adults are eager to maintain cognitive health (CH). Increasing evidence suggests that healthy behaviors, especially physical activity, promote CH. Primary care providers can offer patients information about behavior and CH. Further, tying hypertension and diabetes

treatment and smoking cessation to CH risk may improve adherence. We conducted 10 focus groups and 3 in-depth interviews with primary care providers (n=49) at 3 sites, asking about CH information. Regardless of delivery method (conferences, journals, Internet), preferred information sources had continuing medical education (CME) units. The most common information sources were pharmaceutical representatives and the popular media (local newspapers, news shows, celebrities on TV). Many providers used online subscription services for the latest research. Providers judged that research about the association between behavior and CH is “inconclusive,” with more research needed. Findings suggest a need for diverse communication strategies tied to CME to disseminate evidence-based CH information to primary care providers.

SESSION 1960 (SYMPOSIUM)

MECHANISMS UNDERLYING RESILIENCE: EXAMINATION OF RESOURCES AND PSYCHOLOGICAL STRENGTHS

Chair: D. Jopp, *Psychology, Fordham University, Bronx, New York*
Discussant: P. Fry, *Trinity Western University, Langley, British Columbia, Canada*

That individuals are often able to handle severe difficulty quite successfully is a fascinating issue that has been a topic of psychological research for decades. Despite the vast amount of research, there are still many open questions. This symposium focuses on the factors that may be underlying mechanisms of resilience. Sampling from an array of challenges including adaptation to a chronic health impairment, getting older, or self-stereotyping, the present papers focus on three types of mechanisms: resources, strategies, and beliefs. Christoph Rott and Daniela Jopp investigate the role of two sets of resources, contrasting the social and the physical environment, as sources of well-being in older adults. Alexa Mislowack examines effects of self-stereotyping on physical and psychological well-being. She uses Whitbourne's identity processing to explore the mechanisms through which stereotyping may operate. Drawing on Brandstaedter's dual process model, Kathrin Boerner investigates different types of coping responses to disability in midlife. Her qualitative and quantitative data provide an in-depth look at the multifaceted process of adaptation. Daniela Jopp and Christoph Rott investigate the factors related to self-efficacy in old age and centenarians. Jennifer Margrett and colleagues examine cognitive resilience and vitality among centenarians, by exploring which factors relate to cognitive competence and what characterizes the group of highly resilient individuals. Prem Fry will serve as a discussant. In sum, the papers show that resources and psychological strengths such as strategies and beliefs are mechanisms underlying resilience, and that these mechanisms help to gain a better understanding of the phenomenon of resilience.

PERSONS OR PLACES - ARE SOCIAL INTERACTION AND GOING TO FAVORITE PLACES SIMILAR SOURCES FOR WELL-BEING IN VERY OLD AGE?

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It is well established that social interaction especially with persons that represent close relationships is an important source of well-being in old age. Much less evidence is available whether going to favorite places exerts a similar effect. In the current study affect, social interaction, visiting favorite places and physical symptoms of 26 subjects aged 75 to 103 years were assessed on an average of 25 days by daily telephone interviews. Within-person hierarchical linear models revealed that social interaction and going to favorite places enhanced positive affect when analyzed in separate models but each made also a comparable independent contribution when examined concurrently. No effect on negative affect was obtained. The effects of persons and places on positive affect persisted when controlling for physical symptoms that

might interfere with activities. Thus, going to favorite places seems to represent an additional and independent source for well-being in very old age.

POSITIVE AGING IN AN AGEIST SOCIETY: EXAMINING THE IMPACT OF IDENTITY PROCESSING AND SELF- STEREOTYPING ON WELL-BEING

A.M. Mislowack, *Counseling Psychology, Fordham University, New York, New York*

Previous empirical evidence suggests that age self-stereotyping (i.e., internalized ageism) poses serious threats to older adult's physical and psychological well-being. The present study explored the psychological mechanisms through which such self-stereotyping operate (i.e., identity processing styles; Whitbourne, 1986) and examined its impact on “positive aging” outcomes (psychological well-being, health-related quality-of-life, medical adherence). Internalized ageism was measured with Lawton's ATOA scale. Results revealed significant positive correlations between attitude towards aging and PWB ($r=.32$) and HRQOL ($r=.54$). Exploratory path analytic findings using 250 primarily White, community-dwelling adults (age 65-98) revealed both Whitbourne's balance and accommodation produced significant indirect and direct effects on both PWB and HRQOL scores as mediated by ATOA scores. Assimilation, according to Whitbourne akin to denial, was essentially non-informative in predicting positive aging. In conclusion, findings support Whitbourne and Sneed's (2002) hypothesis on the utility of considering internalization of ageist stereotypes within a self-system framework to predict positive adaptation.

COPING WITH DISABILITY – LIFE PHILOSOPHY VERSUS HANDLING CONCRETE CHALLENGES

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When goal pursuit is challenged, adaptive coping responses can involve the persistent effort to change one's situation to reach the goal (assimilation) and, when this no longer seems viable, to adjust one's goals to what is feasible (accommodation; Brandtstädter, 1999). This study used three types of data to examine the role assimilative and accommodative coping among 216 middle-aged adults with vision loss – general coping tendencies measured with scale data, as well as goal-specific coping assessed with item-based and narrative-based data. Whereas mean levels of both coping modes were similar for general coping, assimilative coping was clearly more prevalent in the goal-specific context. Moreover, the two coping modes showed a strong positive correlation for general coping, but either a negative or no link for goal-specific coping. Finally, general coping was more important in predicting depression, while goal-specific coping was more important for goal-interference. Implications for theory and future research are discussed.

SELF-EFFICACY IN YOUNG-OLD, OLD-OLD, AND CENTENARIANS: MEAN LEVELS AND PREDICTORS

D. Jopp¹, C. Rott², 1. *Psychology, Fordham University, Bronx, New York*, 2. *Heidelberg University, Heidelberg, Germany*

Psychological strengths such as self-efficacy have been investigated intensively regarding beneficial effects in young and middle-aged individuals, but much less in old age. Therefore, the present study addressed differences between young-old (n = 230) and old-old (n = 160) individuals as well as centenarians (n = 57) with respect to mean levels and the factors predicting self-efficacy. Self-efficacy was highest in the young-old, and somewhat lower in centenarians. The old-old had the lowest self-efficacy. Self-efficacy was positively related to education, phone contacts, vision, and health, and negatively related to loneliness. Age differential links existed for phone contacts and health, being related to self-efficacy in the younger groups, but not in centenarians. Loneliness was a significant predictor in all groups. Findings indicate that self-efficacy may be at risk in the fourth age, but that individuals are able

to adapt and distance themselves from factors that become continuously worse such as health.

COGNITIVE RESILIENCE AND VITALITY AMONG CENTENARIANS

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Despite advancing age and the presence of known risk factors, many individuals in very late life maintain high levels of cognitive functioning. The question arises as to which factors differentiate individuals who demonstrate cognitive resilience and vitality in advanced age. The current study examined cognitive resilience among 285 centenarians from the Georgia Centenarian Study. Using Mini-Mental Status Examination (MMSE) scores to gauge cognitive status, 55% of centenarians scored above 16 on the measure whereas 45% scored below this cut-off. Higher MMSE status related to greater ability to perform activities of daily living and everyday cognitive problem solving ($p < .0001$). Hierarchical regression analysis was employed to examine the influence of several categories of predictors on cognitive status including demographic and physical status, personality and coping, and social resources. Within the cognitively resilient group, the absence of negative affect and an orientation toward growth were significant predictors of cognitive status.

SESSION 1965 (SYMPOSIUM)

NEW PERSPECTIVES ON SOCIAL RELATIONS IN ADULTS: CONSIDERING HETEROGENEITY

Chair: K. Fiori, *Adelphi University, Garden City, New York*

The importance of social connectivity in adulthood is well-established; concurrently, researchers on differential aging have emphasized for decades the great heterogeneity among older adults. Despite this, many studies on social relationships have neglected the inherent variability of adult development. From multiple perspectives, this symposium seeks to explain that heterogeneity and underscores its importance by linking it to various adaptive outcomes. First, Merz and Huxhold examined the diverging effects of instrumental support provided either by kin or by non-kin on well-being and explored the role of relationship quality as a potential moderator of the association. Second, Fiori and Jager addressed heterogeneity in relationships using a pattern-centered approach that incorporated numerous aspects of support and social exchange. In their longitudinal analysis, latent class membership predicted various health outcomes of American middle-aged and older adults. The next two papers considered differences in self-regulatory processes to explain heterogeneity. Windsor and Anstey found that the strength of the association of positive and negative social exchanges with well-being diminished with increasing age. Huxhold and Wurm showed that individuals' attitudes towards their own aging affects the extent of aging-related decline in social integration. Finally, Rauer, Karney, and Zissimopoulos considered the influence of contextual factors on heterogeneity with respect to the marital relationship. Overall, these studies highlight the complexity of social relations in adulthood, and suggest that considering their inherent heterogeneity is important when trying to understand their influence on quality of life and the full potential of development into late life.

SOCIAL SUPPORT NETWORKS AND HEALTH ACROSS THE LIFESPAN: A LONGITUDINAL, PATTERN-CENTERED APPROACH

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Social support is a multidimensional construct that consists of the type of support (i.e., instrumental or emotional), the direction of support (i.e., given or received), the sources or targets of support (e.g., kin

vs. non-kin), and whether support is actual or potential. We used latent class analysis to uncover network types based on these dimensions and to examine the association between network types and health among 6,824 adults (M age = 54 at T1) in the two most recent waves (1992-3 and 2003-5) of the Wisconsin Longitudinal Study. We found six classes, or types, of social support networks. Class membership at T1 significantly predicted emotional, cognitive, and physical health at T2 (e.g., the "restricted" network had higher depressive symptoms at T2 than the "high potential support" network). Our findings will be discussed in light of the utility of a pattern-centered approach for uncovering heterogeneity in the social networks of adults.

REMARRIAGE IN OLDER ADULTHOOD: SIMILAR IN SUPPORT, YET NOT IN BENEFITS?

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Although the benefits of marriage for older adults' health are well-documented, they appear to be enjoyed to a lesser extent by those in remarriages. One perspective on why this disparity exists is that remarriages are of lower quality than first marriages and thus provide fewer health benefits. To examine this, we compared continuously married and remarried individuals using the Health and Retirement Study (N = 2,069; M age = 65), controlling for variables likely to select individuals into remarriages (e.g., education). Despite a two-decade difference in marriage length, regressions revealed no differences in remarried and continuously marrieds' evaluations of their spouses' positive and negative support. Remarrieds, however, did report experiencing more chronic stressors. Our results suggest that to understand why remarriages in older adulthood may provide fewer health benefits, we need to look beyond the quality of these relationships to the circumstances in which they are likely to exist.

SOCIAL EXCHANGES AND MASTERY BELIEFS AS PREDICTORS OF AFFECTIVE WELL-BEING: EVIDENCE FROM THE PATH THROUGH LIFE PROJECT

T. Windsor, K. Anstey, *The Australian National University, Canberra, Australian Capital Territory, Australia*

Despite aging-related losses, studies have consistently shown relatively high levels of emotional well-being among older adults. We aimed to contribute to knowledge around the factors that predict well-being over the life course by examining age differences in associations of positive and negative social exchanges with positive and negative affect in a sample of 7472 young, midlife and older adults assessed on two measurement occasions, four years apart. Moderating effects of age on associations of mastery beliefs with affect were also examined. Results indicated a decrease in negative affect with advancing age. Older adults reported the most frequent positive and least frequent negative social exchanges; however associations of social exchanges with affect tended to be stronger among younger and midlife adults. Mastery was consistently related to higher well-being, with stronger associations evident for younger adults. Results are discussed in the context of life course perspectives on goal orientations and self-regulatory processes.

WELLBEING DEPENDS ON SOCIAL NETWORKS CHARACTERISTICS: COMPARING DIFFERENT TYPES AND PROVIDERS OF SUPPORT

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This paper examined associations between characteristics of social relations and wellbeing in older adults. Particularly, emotional and instrumental support from kin and non-kin were studied in their diverging effects on wellbeing. Relationship quality was considered as moderator in the associations between support and wellbeing. Data from the

German Aging Survey were analyzed to predict wellbeing by kin and non-kin support and relationship quality. Emotional support from kin and instrumental support from non-kin were found to be positively associated with wellbeing. Emotional support from non-kin did not associate with wellbeing whereas instrumental support from kin decreased wellbeing. Relationship quality generally was positively related to wellbeing. Interestingly, the negative effect of instrumental kin support was buffered by relationship quality. In case of high relationship quality instrumental kin support benefitted wellbeing. Relations of high quality may ease the challenges of aging such as decreasing capacities and benefit wellbeing in older adults.

DYNAMIC INTERACTIONS OF INDIVIDUAL VIEWS ON AGING AND CHANGES IN SOCIAL NETWORKS

O. Huxhold, S. Wurm, *German Centre of Gerontology, Berlin, Germany*

Socio-emotional selectivity theory predicts that older adults abandon peripheral social contacts in order to maintain close relationships and to preserve high levels of social support. This developmental pattern has been thought of as an adaptive reaction of aging individuals to a limited time perspective or age-related losses in resources. Recent longitudinal studies have found, however, that older adults show significant interindividual differences regarding the development of social relationships. To shed some light on these differences, we link the development of structural social network characteristics to individual views on aging (IVA). It has been shown that, although IVAs are in part formed by actual experiences, individual's attitudes towards their own aging influence the way people age. Dynamic models using 12-year longitudinal data from about 1000 participants of the German Ageing Survey revealed that the more positive the IVA is, the less is the aging-related decline in social integration.

SESSION 1970 (SYMPOSIUM)

REACH OUT: THE BENEFIT OF ACTION GUIDES FOR TRANSLATING EVIDENCE-BASED INTERVENTIONS FOR CAREGIVERS

Chair: *L. McGuire, CDC, Atlanta, Georgia*

Discussant: *K. Maslow, Alzheimer's Association, Washington, District of Columbia*

There are approximately 10 million Americans are unpaid family caregivers who provide annually 8.5 billion hours of care to people with Alzheimer's disease or other dementia. Caring for a person with Alzheimer's disease or other dementia is often very difficult and challenging for a variety of reasons and can result in high levels of emotional stress and depression. For many caregivers, the care that they provide can have negative consequences for their health, employment, and financial security. The purpose of this session is to illustrate how an evidence-based caregiving intervention, REACH OUT (formerly known as the Alabama REACH Demonstration project), can be translated into an Action Guide or "how-to-manual" for the planning, implementation, and evaluation of the program in an agency or organization consistent with the RE-AIM framework. This session will achieve several goals: 1. demonstrate the need for and benefit of using evidence-based caregiving interventions; 2. describe the value of and methodology used to develop the Action Guide; and 3. present the components of the REACH OUT intervention with the supporting evidence. Finally, we will discuss the lessons learned from previous implementations and the benefit of the Action Guide. Through this session, attendees will learn how this intervention's implementation can be facilitated with the methodical approach presented within the Action Guide for use within their community or agency.

THE NEED FOR TRANSLATING EVIDENCE-BASED INTERVENTIONS: WHAT DO THE DATA TELL US ABOUT THE HEALTH AND WELL-BEING OF CAREGIVERS?

L. McGuire, M. Brown, CDC, Atlanta, Georgia

Caregivers provide an invaluable service to the people who receive their care. Approximately 10 million Americans are unpaid family caregivers provide annually 8.5 billion hours of care to people with Alzheimer's disease or other dementia. This type of caregiving may allow an individual with Alzheimer's disease to remain at home or in the community longer. For many caregivers, the care that they provide can have negative consequences to their physical and mental health, employment, and financial security. The purpose of this presentation is to provide an illustration of characteristics of caregivers, specifically those who care for persons with Alzheimer's disease, demonstrating the importance and need for implementing evidence-based interventions to improve the health and well-being of caregivers. This presentation will summarize recent findings from the Centers for Disease Control and Prevention, Alzheimer's Association, and other organizations with respect to caregivers' physical health, mental health, modifiable healthy lifestyle behaviors, and the use of preventative behaviors.

TRANSLATING THE REACH CAREGIVER INTERVENTION FOR USE BY AREA AGENCY ON AGING PERSONNEL: THE REACH OUT TRIAL

L.D. Burgio, School of Social Work, University of Michigan, Ann Arbor, Michigan

The Purpose Of This Project Was To Translate The Evidence-Based REACH II Intervention For Dementia Caregivers For Use In Four Area Agencies On Aging (AAAs). We Used a Quasi-Experimental Pre-Post Design. A Partnership Was Formed Between The Alabama Department Of Senior Services And The University Of Alabama. Through The Use Of Community-Based Participatory Research Methods The Partnership Trimmed The Full REACH Intervention Used In The Clinical Trial, For Feasible Use In The AAAs. A Condensed REACH Intervention Package (REACH OUT) Was Delivered To AD Caregivers During Four Home Visits And Three Therapeutic Phone Calls Over A 4-Month Period. A Condensed Assessment Package Examined Pre-Post Effects On Care-Recipient Risk And Behavior Problems, And Caregiver Burden, Health, And Depression. All Aspects Of The Program Except For Training And Periodic Consultation Were Controlled By AAA Staff. Significant Positive Pre-Post Effects Were Found On Caregiver Burden, Depression, Perceived Help, And Frequency Of Behavior Problems. A Caregiver Survey And AAA Interventionist Focus Group Reported High Acceptability Of The Program. After Attending This Symposium, Participants Will Be Able To Identify One Strategy For Translating Interventions Developed In Clinical Trial For Feasible Use In The Community.

DEVELOPING AN ACTION GUIDE TO TRANSLATE A CAREGIVING INTERVENTION

S.B. Toal, CDC, Atlanta, Georgia

The purpose of this session is to describe the development of a tool, referred to as an "Action Guide," designed to assist organizations in implementing caregiver programs. This session will first describe the value of an Action Guide and present examples of how this tool has been used in various public health programs. Then, the methodology used to develop the Action Guide will be delineated. Emphasis will be placed on how to dissect an intervention into planning, implementation, and evaluation phases. The REACH OUT caregiver intervention, formerly known as Alabama REACH, will be used as a case example. REACH OUT is designed to improve the lives of dementia caregivers by reducing their stress and burden. Through a series of home visits and phone calls, caregivers increase their knowledge of dementia and the caregiving role and learn various skills targeted at themselves (improving their health, teaching stress management) and the care recipient (teaching them how to manage problem behaviors). REACH OUT has been suc-

cessfully implemented in Alabama as a state-wide program and in several other settings, and holds promise for additional widespread implementation. Through this session, attendees will learn the importance of Action Guides in the translational process, gain an understanding of the methodical approach used in developing such Guides, and be able to apply this approach within their community or agency.

REACH OUT IMPLEMENTATION: LESSON LEARNED IN THE FIELD

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REACH OUT is a model program of a successful translational project in the area of Alzheimer's caregiving. Many lessons have been learned in implementing the REACH OUT intervention in community settings. A successful program involves coordination among administrators and clinical staff from multiple organizations. Program planners and coordinators must contend with real world challenges such as budget constraints, limited human resources, and competing missions. The program was well-received by Alzheimer's family caregivers. In addition, it was praised by the staff implementing the intervention. Attendees will learn aspects of a successful implementation and the associated challenges from the perspective of both the Project Manager at The University of Alabama and the State Project Director. These will include lessons learned with respect to coordinating efforts among all partnering organizations, program development, training, consultation, and data analysis.

SESSION 1975 (POSTER)

SOCIAL NETWORKS

ASSOCIATION BETWEEN MARITAL STATUS AND LEVEL OF SOCIAL SUPPORT FOR AFRICAN AMERICAN WOMEN

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Several scholars have detailed the importance of social support over the life course (Everard, 2000; Fung, Carstensen, & Lang, 2001; Lang & Baltes, 1997; Shaw, Krause, Liang, & Bennett, 2007). In an earlier study, Barrett (1999) found significant differences in levels of social support related to marital status. This current study sought to replicate and build upon Barrett's earlier study, with a focus on African American women. Tucker (2003) found that never married African American women reported less social support than married women. Social support is important because low levels of social support have been found to be correlated with depression (Lakey & Cronin, 2008). In this secondary data analysis study, the Americans' Changing Lives (ACL) longitudinal data set is used (House, 1986, 1989, 1994, & 2006). The research question asks whether there is an association between marital status and levels of social support for African American women, across their life spans. The hypothesis states that there is an association between marital status and levels of social support. Analysis of variance (ANOVA) was used in testing the hypothesis. Demographic factors controlled for include age, education, income, and health status. The sample of 3617 respondents was 53% female (n=1914), 11% Black (n=397), 69% married (n=2509), 20% previously married (n=738), and 10% never married (n=370). Significant between group differences related to marital status were found for social support, while controlling for race, gender, age, income, education, and self-reported health status. The findings have been weighted in order to generalize results to the population.

ON THE PROWL? EXPLORING 'COUGAR CULTURE' IN THE U.S

B. Harris-Wallace, L. Clark, *University of Maryland, Baltimore County, Baltimore, Maryland*

In the 1950 screen classic "Sunset Boulevard," an aged actress, Norma Desmond, attempts to revitalize her career by developing a relationship with a young, male screenwriter. "The Graduate," another Hollywood favorite, portrays the May-September romance as one of predator-prey, with an aging seductress enticing a young, naive schoolboy. In recent years, the popularity of the "older woman – younger man" relationship has risen due, in part, to its increased presence within Hollywood circles: Demi Moore, Madonna, and Ivana Trump are just a few of the celebrities leading this trend. The term 'cougar' has infiltrated popular media and culture, typically used to describe women who actively pursue younger men. Originally used in Canada as a slang term, some women view it as derogatory or demeaning, while others embrace it as portraying an image of desirability, independence, and empowerment. This paper examines the emergence of the 'cougar culture' in U.S. society. First, we present demographic and historical backgrounds, and common definitions existent in literature and popular culture. Next, we provide brief but exemplary representations of the 'cougar' in cinema, television, literature, and internet media. Third, we analyze these representations in the context of feminist and sociological theory, and discuss two relevant perspectives: the emergence of 'cougar' as social status, and the sub-cultural re-appropriation. We present positive and negative aspects of these, and conclude by suggesting future research that uses these frameworks to further understand how acceptance or rejection of cougar status influences relationships for women throughout their life course.

LIVING CONDITIONS AMONG PEOPLE WITH MULTIPLE HEALTH PROBLEMS

J. Heap, B. Meinow, M.G. Parker, M. Thorslund, *NVS, Karolinska Institutet & Stockholm Univ, Aging Research Center, Stockholm, Sweden*

This study focuses on very old people with multiple severe health problems. In Sweden, mortality rates for this group have declined and prevalence rates have increased significantly between 1992 and 2002. Thus, people live longer with multiple health problems than before. For those with multiple health problems, life can be said to be more difficult than for those without multiple health problems. When studying the concept Sense of Coherence, elderly people with multiple health problems to a lesser extent felt that life was manageable, comprehensible and meaningful. Besides having severe health problems – what are their living conditions really like? Our results from SWEOLD, a nationally representative survey of persons aged 77+, show that most elderly people with multiple health problems live alone. Looking at economic conditions, those with multiple health problems more often than those without multiple health problems had a lack of cash margin, but they did not report trouble managing their private economy. Regarding social network, almost all had someone to talk to about personal worries. Those with severe health problems had friends/acquaintances and relatives over to visit as frequently as those without severe health problems, but they were less likely to go out to visit others. Results also suggest that elderly people with multiple health problems felt lonely more often than those without multiple health problems. In summary, very old people with multiple health problems have somewhat fewer economic and social resources, but there were few signs of economic destitution or social isolation.

CORE DISCUSSION NETWORK TYPOLOGY AND EMOTIONAL WELL-BEING AMONG OLDER ADULT

J. Kim, *University of Chicago, Chicago, Illinois*

Being embedded in social network with a particular array of others provides qualitatively different information that is not captured by adding up individual source of close relationship (e.g. number of family, friends).

This study (1) develops the typology of core discussion network to reveal particular array of others and (2) examines the association between social network types and emotional well-being. The data are drawn from National Social Life, Health and Aging Project (NSHAP), a national representative, population-based study of community-residing older adults of age 57-85 (N=3,005). Latent class analysis is used to construct a typology of ego-centric discussant networks revealing six network types: children, friends, kin-friend, partner-divers, partner-children, and partner-centered network. Twenty-seven percent of U.S. older adult population belongs to the partner-children network. Respondent's self-rated physical health, loneliness and depressive symptom scores were regressed on network types, controlling for basic sociodemographic background. Compared to the children network, respondents embedded in the kin-friends network scored significantly higher self-rated physical health, and significantly lower loneliness and depressive symptom. Respondents in the partner-children and the partner-centered network received significantly lower score in loneliness. The results show that respondents in the partner-centered network are even better off than those in the friends network who have almost twice the members and that the magnitude of loneliness is the same as the partner-children network who have almost triple. This supports the idea that a simple count of network members may misidentify the effect of social network on mental health, and calls for examination of network members as a whole.

SOCIAL EXCHANGES AND SUICIDAL IDEATION AMONG OLDER VETERANS WITH BEHAVIORAL HEALTH ISSUES

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Objective: Veterans are at increased risk for suicide-related outcomes, and factors such as older age and medical and psychiatric comorbidity may increase veterans' susceptibility to suicide ideation, attempts, and completion. The quality of social ties also is a significant predictor of suicide morbidity and mortality. Despite evidence that relationships are compromised among veterans experiencing mental health/substance abuse (MH/SA) conditions, few studies have explored the association between social interactions and suicidal ideation in this group. Thus, the current study examined the relationship between positive and negative social interactions and suicidal ideation among older veterans experiencing significant MH/SA symptomatology. **Method:** The sample included 134 veterans aged 65+ referred by primary care for a clinical MH/SA assessment following a positive screen. Data on sociodemographics, MH/SA conditions (e.g., depression, PTSD, and substance abuse), the frequency of positive/negative social interactions, and suicidal ideation were extracted from clinical interviews and evaluated. **Results:** The sample was primarily male, Caucasian, married, and financially comfortable, with 24.6% and 32.8% meeting criteria for a MH/SA condition and suicidal ideation, respectively. Multiple logistic regression analysis revealed that, adjusting for sociodemographic and MH/SA conditions, more frequent negative interactions were related to a greater likelihood of suicidal ideation (OR=2.03, p=.003). Positive interactions were unrelated to suicidal ideation. **Conclusion:** Findings highlight the value of exploring the content and quality of social interactions among older veterans with behavioral issues who report suicidal ideation. Doing so may inform the design and implementation of care management models that target social functioning and/or incorporate preexisting social resources.

STRUCTURAL, FUNCTIONAL AND EVALUATIVE COMPONENTS OF SOCIAL RELATIONSHIPS IN A SAMPLE OF SPANISH ELDERLY: AN APPLICATION OF THE CONVOY MODEL (KAHN & ANTONUCCI, 1980)

M.M. Sanchez, J. Buz, *Universidad de Salamanca, Salamanca, Spain*

The convoy model (Kahn & Antonucci, 1980) has been widely used in gerontological research to describe social relationships from a life course perspective. The model was proposed such as an universal framework that could be applied to people from different age groups and cultural settings. The aims of this study are (1) to describe the social network of the Spanish elderly using the convoy model, (2) to validate the distinction between different circles of proximity in social relationships, according to their structural, functional and evaluative components, and (3) to analyze whether they are differentially related to loneliness. A questionnaire was applied to a sample of 646 community-dwelling older adults (60+). Social network data were collected using the hierarchical mapping procedure (Antonucci, 1986). Significant differences were found in the composition, frequency of contact and duration of social relationships. Exchange of instrumental and emotional support was higher in the intimate circle than in the other two circles. Finally, the participants were more satisfied with their intimate relationships than with the relationships with the other network members. The components of social relationships in the three circles were also differentially related to loneliness. A higher proportion of variance was explained by the first and second circles, but the properties of the third circle were also important in the prediction of loneliness. Our results support the application of Antonucci's convoy model (1980) to a sample of Spanish elderly, and show that all levels of intimacy in the social network are important to protect against loneliness.

CONFIDANTS, PROVIDING SUPPORT, AND PSYCHOLOGICAL WELL-BEING: FINDINGS FROM THE NORMATIVE AGING STUDY

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Social support plays an important role for physical and psychological well-being, particularly for older adults (House & Antonucci, 1983; O'Bryant & Morgan, 1990). However, providing social support may also be important for well-being, especially for older adults (O'Bryant & Morgan, 1990). We hypothesized that both the number of confidants and the number of people to whom support was provided would be positively associated with their psychological well-being. We tested this hypothesis using a sample of 1,535 men from the Normative Aging Study (NAS), longitudinal study of healthy aging. The men completed a social survey in 1985. Their age ranged from 39 to 88 (M = 60.6, SD = 3.81). Most participants (87.8%) had at least one close friend and 88.6% of them had one or more confidants. Approximately 70% of the participants had been confided in by others in the past 3 months. Using the depression subscale of the SCL-90-R (Derogatis, 1975), the number of confidants was negatively correlated with depressive symptoms ($r = -.12, p < .001$). Contrary to the hypothesis, the number of people who confided in the participants was positively but modestly related to depression ($r = .10, p < .001$). The more people confided in the participants, the more likely they were to report depressive symptoms. This supports a social contagion model of stress – the larger the network, the more exposure to stressors, and the greater the psychological distress (McAdoo, 1982).

INTERPERSONAL PROCESSES BETWEEN OLDER ADULT FRIENDS: AN ACTOR-PARTNER MODEL

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The present study examined interpersonal processes that occurred when older adults collaborated with a same-sex friend on problem-solv-

ing tasks. According to socio-emotional selectivity theory (Carstensen, 1992), older adults are concerned with sociability when working with a partner because of concerns for maintaining social relationships. Collaboration involves unique contributions of each individual, which also influence the partner's contributions (Strough, McFall, Flinn, 2006). Thus, an actor-partner interdependence model was examined in order to understand "actor" and "partner" effects on interpersonal processes. Specifically, negative relationship quality (arguing, lack of concern for partner) and social elements of the interaction (disagreement, lack of enjoyment) were examined in the present study (Hall, 1992; Keener & Strough, 2007; Strough, Berg, & Meegan, 2000). 76 older adults (ranging in age from 60-89, $M=71.33$, $SD=7.96$) collaborated in a problem-solving task (see Strough et al., 2007). Each dyad member completed a measure of his or her relationship quality with the friend prior to completing the task. After collaboration, each member of the dyad completed separate measures of the interaction's social elements. Structural equation modeling through AMOS 16 indicated that both actor and partner effects were found to explain the negative interpersonal processes during interaction. Results are discussed within a social problem-solving framework.

GENDER DIFFERENCES OF THE RELATIONS BETWEEN WELL-BEING AND PHYSICAL AND PSYCHO-SOCIAL FUNCTIONS

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During the last few decades, the gerontological literature documented the positive aspects of aging, especially among the young old. However, recent studies of the oldest old suggest that the process of optimization in very old age is more difficult than in earlier age, and there are some gender differences in the process. The aims of this study are to examine gender differences of the relations between well-being and physical, psychological and social functions among the oldest old. We sampled 1,600 Japanese elder people aged 85+ living in Tokyo. Six hundred and sixty people completed the test battery of physical functions (ADLs, IADLs and subjective health), psychological functions (MMSE and self-efficacy), social relations (social network, support and companionship), and subjective well-being (WHO-5 and PGC). Gender differences were found in social network and support. Men had higher ratings in the social network and support from family than women, and lower ratings in the social network of friends. For men, well-being was related to the social network and support from family and subjective health. For women, well-being was significantly associated with providing social support, companionship, self-efficacy and subjective health. The results suggest that there are gender differences in the process of optimization in very old age. The elder men may shift the placement of importance from physical and mental functions to family relationships in order to maintain well-being. On the other hand, the elder women may shift the placement of importance to the relationships with friends and siblings, and emotional satisfaction.

IS FRIENDSHIP INCREASING IN IMPORTANCE IN LATE ADULTHOOD? A COHORT COMPARISON

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By providing emotional support, companionship and reassurance of worth, friends makes a unique contribution to well-being in later life that supplements contributions by family. Some argue that friendship has increased in importance during the last two decades. This study examines whether there has been an increase in reporting same-sex and cross-sex friendships in personal networks among members of earlier and more recent cohorts of older adult men and women during 17 years. Method: Data are from 1764 male and 1857 female respondents, born between 1908 and 1937, and followed between 1992 and 2009 in the Longitudinal Aging Study Amsterdam. At each observation assess-

ments were made on whether male or female friends were personal networks members. Logistic multilevel regression is used to compare developments in the presence of same-sex and cross-sex friends in personal networks of more recent cohorts and earlier cohorts. Results: There is a decline in the availability of same-sex and cross-sex friendships that accompanies aging among both recent and earlier cohorts of older adults. However the decline is less dramatic among more recent cohorts, particularly for female friends of women. Conclusion: There is evidence that the presence of same-sex and cross-sex friends in personal networks has increased slightly among more recent cohorts of older men and women; the increase is striking for women's female friends. Implications of the increase in education, employment of women and urbanization for these results will be discussed.

MORE THAN A GAME: WII IN RESIDENTIAL CARE SETTINGS

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The Nintendo Wii gaming system has gained popularity with a wide audience, including older adults living in institutional settings. This poster explores the use of Wii gaming in a multi-residential senior housing site comprised of independent apartments, assisted living units, and a nursing home. Data for our analysis was drawn from over 54 reflexive interviews and 130 fieldnotes compiled during 18 months of conducting ethnography at the field site. Our findings suggest that the way in which the game is organized and monitored by staff influences the way residents approach the game, and that participation in Wii gaming leads to positive psychological outcomes, such as a sense of personal accomplishment and greater camaraderie among residents. We examine the ways in which residents with differing physical and cognitive functional levels are able to play together. We also explore both the relevant issue of resident safety and the game as a social event where residents take on, at the same time, the roles of both spectators and players. Comparisons within and between settings are made. Support for this poster comes from a multi-year, multi-site qualitative NIA-funded study, Stigma and the Cultural Context of Residential Settings for the Elderly (R01 AG028469 P.I., J. Kevin Eckert).

CONSIDERING THE SOCIAL IMPACT OF MARITAL STATUS CHANGE FOR MEN

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Earlier research on the social impact of marital status and marital status change has tended to focus on the differences between the married and unmarried, or single, with little research attention paid to individual marital status groups, and the social changes experienced by men over time. Using qualitative interviewing, this research aimed to examine how transitions into, and out of, marriage affect social relationships and social interaction. Cohabiting, married, separated/divorced and widowed men were interviewed, and transcripts were analysed using grounded theory. The findings strongly suggest that marital status does affect men's access to social resources, including social networks, positive social interaction and social support. There were interesting differences in social network between marital status groups, specifically in the loss and gain of relationships over time. Cohabiting and married men reported a growth of the social network, whilst separated, divorced and widowed men were more likely to experience the loss of social contacts. There were also differences between marital status groups in social confidence, social interaction, and received social support, with generally higher levels reported in the cohabiting and married groups. Availability of these social resources had appeared to have an important effect on the participants' sense of wellbeing. Marital status transitions appear to have important social implications for men, and the impact of marital status change may vary by age. Support services should work with

the aim of minimising the negative social outcomes of transitions out of marriage, including separation, divorce and widowhood.

THE IMPACT OF SOCIAL SUPPORT ON FUNCTIONALITY OF OLDER ADULTS WITH AND WITHOUT FIBROMYALGIA

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Fibromyalgia (FM) is a chronic disease/condition characterized by widespread pain, fatigue, stiffness, and concentration problems that affects roughly 10 million Americans. Persons with FM commonly report physical, cognitive, and psychological difficulties, but studies have suggested that social relationships may play a role in reducing the impact of the disease. Data from 70 individuals diagnosed with FM and 76 healthy controls (ages 50-87; $M = 64$) were used to assess the extent to which perceived social support impacts physical, psychological, and cognitive functioning. Controlling for age, linear regression results revealed significant interactions (FM status \times MOS social support score) for physical function (12-item composite measure) and depression (Beck Depression Inventory). Specifically, although non-FM participants reported higher levels of physical function and lower levels of depression (regardless of perceived social support), greater perceived levels of social support served as a significant buffer for FM participants in both of these domains ($p < .05$). In terms of performance on a cognitive measure of practical problem solving (The Everyday Problems Test), non-FM participants outperformed FM participants, but neither the interaction term nor the main effect of social support was significant. Thus, results suggest that perceived social support may reduce the effects of depression and improve physical function, especially for FM sufferers, but does not appear to impact problem solving abilities. Possible explanations for the findings are presented and potential intervention implications are discussed.

CONVOYS IN VERY LATE LIFE

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This study investigated the influence of social relations in very late life by empirically examining Antonucci and colleagues' (2009) support/efficacy convoy model for older adults who resided in three different residential environments (80s in private homes, $n = 75$; centenarians in private homes, $n = 126$; centenarians in assisted living facilities, $n = 55$; and centenarians in nursing homes, $n = 105$). Based on the conceptual model, we specified and evaluated a path analytic model for each group. Self-efficacy was hypothesized to mediate the relationship between measures of social relations and both physical and mental health outcomes. All models tested controlled the endogenous variables for sex, mental status, perceived economic sufficiency, and activities of daily living. Model tests were conducted with Mplus Version 5.1 using full-information maximum likelihood (FIML) to handle missing data; overall model fit was assessed by employing the Satorra-Bentler chi-square test statistic (robust to non-normality of measures), CFI, SRMR, and RMSEA. Results indicated relationships between the conceptual model's variables unique to each of the four groups; four different models fit the data depending upon age group and residential environment. Implications of these findings for older adults in very late life are discussed.

SOCIAL NETWORKS AND WELL BEING IN SOCIO-GEOGRAPHICAL CONTEXT: A COMPARISON OF OLDER PEOPLE IN MEDITERRANEAN AND NON-MEDITERRANEAN EUROPEAN COUNTRIES

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Objectives: This study examined whether the social networks of older persons in Mediterranean and non-Mediterranean countries were appreciably different, and whether they functioned in similar ways in relation to well-being outcomes. **Methods:** The sample included family household respondents aged 60 and older from the first wave of the Survey of Health, Ageing and Retirement in Europe, in five Mediterranean ($n=3,583$) and seven non-Mediterranean ($n=5,471$) countries. Region was regressed on variables from four network domains: structure and interaction, exchange, engagement and relationship quality, controlling for background and health characteristics. In addition, two well-being outcomes—depressive symptoms and perceived income inadequacy—were regressed on the study variables, including regional social network interaction terms. **Results:** The results revealed differences across the two socio-geographical settings in each of the realms of social network, above and beyond the differences that exist in background characteristics and health status. The findings also showed that the social network variables had different effects on the well-being outcomes in the respective settings. **Discussion:** The findings underscore that the social network phenomenon is culturally bound. The social networks of older people should be seen within their unique socio-cultural milieu, and in relation to the values and social norms that prevail in different socio-geographical settings.

PERCEIVED SOCIAL PROFICIENCY RELATED TO OLDER ADULTS' INTEREST IN RELATIONSHIPS WITH INDIVIDUALS WITH PD

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Social problems are common reports among individuals with Parkinson's disease (PD). While PD symptoms may affect social relationships, first impressions about sociability could also contribute to social difficulties experienced by individuals with PD. This study investigated the hypothesis that social proficiency, which refers to the proportion of positive to negative social behaviors expected from a target, would be associated with perceivers' interest in future relationships after controlling for perceiver gender, which may also affect perceiver sociability. Fifty-eight older adult perceivers viewed brief, content-filtered video clips of 12 targets with PD (6 female) and predicted how supportive and straining each target would be, as well as indicated their interest in getting to know the target better. Hierarchical multiple regression showed that social proficiency contributed to future relationship interest above and beyond the effects of perceiver gender (R -squared change = .26, $F(1, 54) = 20.27$, $p < .01$). Older adult perceivers were significantly more interested in getting to know individuals whom they believed would be more supportive than straining. These findings are consistent with socioemotional selectivity theory in that these perceivers seemed to use a rational guideline for making decisions about relationships by showing more interest in pursuing relationships — perhaps even new ones — that were likely to be associated with positive affect. Furthermore, these results suggest that older adults may be interested in relationships with individuals with PD if they believe the target would be a positive addition to their social network.

CAREGIVING, MARITAL QUALITY, AND PHYSICAL HEALTH: EVIDENCE FROM MIDUS 2004-05

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Guided by a life course perspective, this study aimed to add to a population perspective on caregiving, marital quality, and physical health

risks of family caregiving by (1) examining how providing caregiving for a child, spouse, or parent due to their illness or disability (in contrast to not providing caregiving for any kin or nonkin) is linked to multiple dimensions of physical health (self-rated health, health symptoms, functional limitations) and (2) evaluating how two dimensions of marital quality (spousal disagreement, spousal strain) might moderate caregiving risks to health. Data from 1138 married respondents aged 32-84 participating in the second wave of the National Survey of Midlife in the U.S. (MIDUS 2004-05) were used to estimate multivariate models. Models also adjusted for numerous sociodemographic factors. Results revealed that providing caregiving for a child was associated with poorer self-rated health, more functional limitations, and more health symptoms. Models evaluating moderation of caregiving risks to health by levels of spousal disagreement and spousal strain revealed that spousal caregivers who reported more disagreement or more marital strain reported poorer self-reported health; more disagreement was also linked to more functional limitations among spouse caregivers. Caregivers for parents who reported more marital disagreement or more marital strain indicated poorer self-assessed health, more functional limitations, and more symptoms than caregivers for parents with better marital quality. Overall, results suggest caring for a child is linked to significant health risks, and marital quality is an important moderator of health risk for married caregivers for spouses and parents.

INTERGENERATIONAL SUPPORT BETWEEN OLDER ADULTS AND ADULT CHILDREN IN JAPAN: LONGITUDINAL TREND BETWEEN 1999 AND 2006

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This study investigated the extent to which older adults provide and receive support from adult children and how it relates to their attitudes towards and utilization of formal care services. Study aims were addressed based on the analysis of a nationally representative sample of older adults (n=6,201) from the first four waves of data of the Nihon University Longitudinal Study of Aging (NUJLSOA), with a particular focus on the longitudinal participants in all four waves (n=2,337). Logistic regressions over time revealed the longitudinal trend where older adults and adult children continue to exchange support; however the flow of support tends to become primarily upward as they age: from adult children to older parents. Both receiving and providing support for adult children tended to be determined by the level of resources presented by older adults, such as their spousal availability, household income, and health condition. Among different types of support examined, the most common were adult children's assisting their parents for shopping, providing companionship, and offering financial help. On the other hand, older adults were mostly assisting their children with their finances, house chores, and food preparations. Older adults' personal attitudes against formal care services did not significantly impact the extent to which they rely on informal resources of adult children. The results are discussed in the current social welfare context of Japan, where the enactment of national long-term care policy in 1999 created new avenues of formal care service interventions for its growing number of older population.

WITHIN-FAMILY GENERATIONAL DIFFERENCES IN ATTITUDES TOWARD AGING: A PRELIMINARY INVESTIGATION

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The numbers of families with multiple generations living together is increasing. To improve quality of life in aging people by helping to reduce intergeneration conflict, especially in such close quarters, it is important to understand within-family intergenerational differences in attitudes toward aging. These differences may affect (a) personal definitions of the term "old," (b) attitudes toward the process of aging, (c)

individual definitions of "successful aging," and (d) attitude toward one's own aging. In an effort to explore this heretofore uncharted territory, a case study approach was taken, examining four generations of women in one family ranging in age from 24 to 98. Individual in-person and telephone interviews were conducted with the participants, and each was asked the same set of questions. Responses indicated that within families, similarities exist across generations in attitudes toward aging such as the notion that aging is less about "chronological age" and more about engagement, personal adaptation, and acceptance of self. Attitudes can be "learned" by watching previous generations and how they age. Generational differences relate to what respondents believe they can (or plan to) do in their later years, and generational influences are bi-directional in nature. In conclusion by looking at within-family differences in attitudes toward aging, research will help elucidate the significance of personal familial experience and its effect on attitudes toward aging. The importance of aging role models for younger adults and the bi-directional nature of generational influence on attitudes toward aging have implications for gerontology policy, practice, and research.

MARITAL STATUS, MARITAL QUALITY, AND BIOLOGICAL HEALTH RISKS: EVIDENCE FROM THE NATIONAL SURVEY OF MIDLIFE IN THE U.S. (MIDUS)

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This study aimed to examine the associations between marital status combined with marital quality and cumulative health-related biomarker risks of adults (i.e., allostatic load) by using survey and biomarker data from National Survey of Midlife in the U.S. (MIDUS) 1995-2005. OLS regression models were estimated using data from 344 respondents (176 women, 168 men) aged 34-84 in 2005 who participated in the MIDUS I (1995: M1) and MIDUS II (2004-2005: M2) and biomarker data collection and were either (1) continuously single (i.e., separated/divorced) M1-M2 (N=81), (2) continuously married to a first spouse with high marital strain at both M1 and M2 (N=113), or (3) continuously married to a first spouse with low marital strain at both M1 and M2 (N=150), and controlling also for age, gender, education, household income, having a child, employment status, financial strain, medications, and T1 self-assessed health. Results indicated: (1) Adults continuously married over 9-10 years to a first spouse indicated lower biological health risks (i.e., lower allostatic load) compared to continuously single adults regardless of levels of marital strain over time; (2) this pattern was stronger among younger continuously married adults compared to older continuously married adults. (3) Among continuously married adults, women with high marital strain demonstrated greater biological health risks than men with high marital strain, in contrast to their continuously single peers. Overall, findings suggest that it is not marital status alone but also marital quality that impacts the biological health risks of adults, contingent on their age and gender.

MIDLIFE SOCIAL SARCOPENIA TRANSLATES TO LOSS OF SOCIAL MUSCLE FOR SUCCESSFUL AGING

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Midlife offers a perspective of individual adaptation or rejection of situational factors to maintain or improve one's life trajectory. This theoretical analysis offers insight into the magnitude that off-time pursuits and lost opportunities by midlife in an age-graded society affect the ability to age successfully. Transitions and turning points are deemed personal choices with modest attention given to social conditions and constraints. While some people can overcome personal obstacles and pitfalls to fulfill goals and dreams, the extent that environmental determinants influence when individuals close the door on a chapter of their life and settle into an obtainable life course is not understood completely. Social sarcopenia is a term I created to define a loss or inability to obtain personal goals and social expectations due to survival in a society driven

by age norms. Therefore, by examining the intersectionality of goal tenacity, goal strategy, planning for the future, making sense of the past, perceived social support, value to world, and life satisfaction an understanding of the factors that underlie the pressure and consequences of life course transitions and turning points will be defined. While turning points and transitions occur throughout the life course trajectory, focusing on midlife offers a perspective on the social networks accumulated along with the how individuals make decisions about their future life/work trajectories toward successful aging. Social sarcopenia can identify the loss of social muscle needed to weather structural lag in an age-normed society and age successfully into older adulthood.

SESSION 1980 (SYMPOSIUM)

TAILORED CAREGIVER ASSESSMENT AND REFERRAL: AN EFFECTIVE TOOL FOR TRIAGING SUPPORT SERVICES AND REDUCING CAREGIVER DEPRESSION AND BURDEN

Chair: R. Montgomery, *School of Social Welfare, University of Wisconsin - Milwaukee, Milwaukee, Wisconsin*

Discussant: K. Maslow, *Alzheimer's Association, Washington, District of Columbia*

Although efforts to provide support services for caregivers have increased, the scarcity of resources creates a challenge for policy makers, state program administrators, and practitioners to be efficient and strategic in their allocation of resources. Without valid and reliable mechanisms to accurately assess caregivers' needs and effectively target services to those needs, service providers are not able to use their resources wisely and efficiently; nor are caregivers well served. The Tailored Caregiver Assessment and Referral (TCARE) process is a caregiver assessment and referral protocol that gives care managers (care coaches, family specialists) an efficient strategy and tools to accurately assess caregivers' needs and create individualized care plans that will maximize benefits and enable organizations to allocate resources in an efficient manner. This symposium provides a detailed description of the development and testing of the TCARE model. The first paper provides a review of critical literature on care management, identifies core elements of care management practice, and outlines challenges for serving caregivers as a client population. The second paper describes the TCARE protocol and the interactive process used to develop it. The third paper describes findings from a process evaluation that demonstrated success with teaching the protocol to practitioners and maintaining fidelity with the process. The fourth paper reports findings from two randomized trials that document a significant impact on caregiver stress and depression. The final paper provides additional findings from two studies that identify the mechanism by which the TCARE process leads to positive outcomes.

THE ELEPHANT IN THE ROOM: RECOGNIZING THE FAMILY CAREGIVER

G. Kadushin, J. Rowe, *Social Work, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin*

This paper lays a foundation for creating and implementing care management protocols that could effectively support family caregivers. Despite wide recognition of the central role of family caregivers in the long term care system, few programs or policies fully acknowledge family caregivers as legitimate clients who could benefit from care management services. Recent advocacy for the inclusion of caregiver assessment as part of elder care programs have stopped short of advocating for care management services essential for supporting caregivers and older adults. Drawing upon the research concerned with care management and geriatric care management, this paper 1) identifies core elements that are implemented to access and coordinate formal and informal supports for people with complex chronic problems, 2) explores organizational and policy barriers to the adoption of a family-centered care man-

agement framework, and 3) provides recommendations regarding requisite skills and knowledge for effectively serving family caregivers.

DEVELOPMENT OF TCARE AND RANDOMIZED TRIAL: TRANSLATING RESEARCH TO PRACTICE

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The TCARE demonstration project is a 30-month randomized study designed to assess the hypotheses that implementation of TCARE will lower caregivers' depression and burden, increase caregiver uplifts, reduce identity discrepancy, and lower the probability of caregivers leaving the role. This paper describes the development of the TCARE protocol and of the measures included in the caregiver assessment tool and used to assess outcomes. The six step protocol, guides care managers through an assessment, consultation and care planning process. It reflects findings from a series of studies that included: (1) focus groups conducted with care managers and caregivers; (2) the creation of a caregiver registry to serve as a study population to develop, refine and norm measures; (3) the design and pilot testing of the assessment tool; (4) development of decision algorithms to guide care management decisions; and (5) pilot tests conducted in collaboration with service delivery organizations in four states.

FEASIBILITY AND FIDELITY OF IMPLEMENTATION OF TCARE BY CARE MANAGERS

J. Rowe, M. Wallendal, E. Enriquez, *School of Social Welfare, University of Wisconsin - Milwaukee, Milwaukee, Wisconsin*

A formal monitoring process was used to test for accurate and consistent implementation of TCARE by 40 care managers. The monitoring process entailed a review of all forms that were completed as part of the protocol for each caregiver at initial assessment and 6-month follow-up. Care managers were evaluated on two dimensions: (1) mechanics of implementation (i.e. the care managers' ability to accurately follow the process and complete forms) and (2) successful creation of an appropriate and viable care plan. A composite score was created for each care manager on each dimension. Descriptive statistics provided support for accurate and consistent implementation by care managers. At baseline, the overall average scores were 78.5% on mechanics and 88.7% for creation of appropriate care plans. These findings support the conclusion that care managers can be trained to successfully implement the TCARE protocol in a consistent manner.

PRELIMINARY FINDINGS FROM THE TCARE NATIONAL DEMONSTRATION

J. Kwak¹, K. O'Connell Valuch¹, L. MacBride¹, J. Lang¹, K. Kosloski², R. Montgomery¹, *1. Social Work, University of Wisconsin, Milwaukee, Wisconsin, 2. University of Nebraska, Omaha, Nebraska*

Findings are reported for initial analyses of data from two longitudinal, multi-site cluster randomized control trials of TCARE. Outcome variables examined include three measures of caregiver burden (stress, relationship, objective), identity discrepancy, and depression. Data were available for 174 caregivers randomly assigned to TCARE (n=90) or control groups (n=80) who completed up to three interviews at 3-month intervals. Descriptive statistics and individual growth modeling using SAS Proc Mixed procedures were conducted. Caregivers are female (79%), married (68%), white (72%), caring for someone with memory problem (90%), and living with the care-receiver (80%). Analyses revealed a significant group by time interaction on stress burden [F (2,144) = 8.70, p < .001] and depression [F (2,145) = 5.11, p < .01]. At T2 and T3, mean scores for both stress burden and depression were significantly lower for the TCARE group than for the control group.

MECHANISMS THAT PRODUCE POSITIVE OUTCOMES IN CAREGIVER INTERVENTIONS: THE ROLE OF IDENTITY DISCREPANCY

M.Y. Savundranayagam¹, R. Montgomery¹, K. Kosloski², 1. Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin, 2. University of Nebraska, Omaha, Nebraska

Few interventions for family caregivers directly test the mechanisms that contribute to positive outcomes. Caregiver identity theory posits that individuals experience burden when self-appraisals of behaviors are discrepant with expectations for their relationship identity. This study examined the extent to which change in identity discrepancy served as a mechanism by which burden and depression were reduced for participants in the Tailored Caregiver Assessment and Referral (TCARE) process versus a control group. Analyses using multiple hierarchical regression revealed that change in discrepancy had a significant effect on depression and on stress, relationship, and objective burden. Moreover, TCARE participants reported significantly less stress burden over time compared to the control group. Finally, chi-square tests revealed that a greater proportion of TCARE participants reported decreases in discrepancy compared to the control group. The findings support the utility of caregiver identity theory as a framework to test caregiver interventions.

SESSION 1985 (SYMPOSIUM)

TECHNOLOGY TOOLS TO SUPPORT OLDER ADULTS' SOCIAL INTERACTIONS AND INDEPENDENCE

Chair: G. Demiris, University of Washington, Seattle, Washington
Discussant: D. Parker Oliver, University of Missouri-Columbia, Columbia, Missouri

As technology advances and new positive models of aging emerge, there are new paradigms of technology enhanced platforms that support aging in place and independence of older adults. Specific systems include web-based applications to facilitate communication and home based monitoring technologies that capture both physiological variables and behavioral patterns. Research initiatives in this area have to address recruitment and retention issues, privacy and training issues as well as new ways to engage older adults in virtual environments. This symposium presents a series of ongoing initiatives, both research studies that include online trials and training initiatives pertaining to the use of computers and the Internet, as well as approaches to enhance and support aging in place with telehealth solutions that bridge geographic distance and sensor-based tools that capture behavioral patterns of older adults in an independent retirement community. Additionally, technology introduces new ways to address social isolation and enable older adults to communicate with distant family members and peers using tools that facilitate virtual communities. In this context, the concept of obtrusiveness of technology is discussed and a theoretical framework highlighting underlying dimensions is presented. Furthermore, the symposium addresses privacy and other ethical implications associated with the use of innovative technologies that promote social interactions and independence.

BEHAVIORAL SENSING TECHNOLOGIES FOR AGING IN PLACE

G. Demiris, University of Washington, Seattle, Washington

"Smart homes" are residential settings wired with sensor technologies that enable the detection of emergencies and identification of behavioral patterns and have the potential to support aging in place. Two distinct approaches to smart home design, namely Distributed Direct Sensing (DDS) and Infrastructure Mediated Sensing (IMS), have distinguishing features and implications resulting from their implementation. These two approaches have not been directly compared pertaining to their technical performance or their acceptance by older adults. It is also unclear what the perceived privacy and obtrusiveness concerns are

when it comes to the implementation of these two different approaches in homes. The study presented here aimed to evaluate acceptance of these two sensing approaches by older adults and assess the perceived privacy and obtrusiveness concerns and ultimately define social implications of "smart homes."

TRAINING OLDER ADULTS IN ASSISTED LIVING IN THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTS): RESULTS FROM A RANDOMIZED CONTROLLED TRIAL

S.R. Cotten, Sociology, UAB, Birmingham, Alabama

Depression, physical health decline, loneliness, and social isolation are key issues of concern for older adults. With increasing numbers of older adults going into long term care facilities and declines in quality of life as individuals age, we need innovative ways to decrease these negative impacts and to enhance quality of life. The use of information and communication technologies (ICTs) represents one such way to potentially enhance quality of life among older adults. Early results are presented from a randomized controlled trial designed to train older adults in assisted living facilities to use ICTs, specifically computers and the Internet. Issues encountered in setting up portable computing labs, recruiting assisted living facilities and residents, and ensuring equivalence across groups are discussed. The types of data being collected, as well as early results, are also presented. Implications for designing other interventions using ICTs will also be discussed.

CHALLENGES AND STRATEGIES FOR RECRUITMENT AND RETENTION IN ONLINE TRIALS WITH OLDER ADULTS

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Rapidly advancing information communication technology has revolutionized current healthcare, and more health-related studies are being conducted online. Although older adults are one of the fastest growing online user groups and have a significant interest in health, few online studies have focused on these individuals. Over the years, the authors have conducted several online studies focusing on older adults, including web surveys and behavior intervention trials. Through our research we have identified unique challenges and effective strategies for engaging older adults in online studies. In this presentation, we will discuss our findings in: (1) online recruitment focusing on sample representativeness, trust building, and recruitment methods; and (2) retention of participants focusing on usability, technical support, and follow-up plans. Our findings demonstrate older adults' high level of interest and willingness to participate in online health studies. To maximize benefits of online health interventions for older adults, more online studies must be conducted.

COMPUTER-ASSISTED SOCIAL ENGAGEMENT

N.E. Cutler, Motion Picture & Television Fund, Woodland Hills, California

Because elders nowadays want to live in their own homes as long as possible, the Motion Picture & Television Fund's Center on Aging is developing computer technology as central to this goal. And because Aging-in-Place need not be Aging-in-Isolation, our technology focuses on Computer-Assisted Social Engagement ("CASE") to enable the health, safety, and independence of community-resident older women and men. CASE uses web-based desktops with large touch screens, displaying software that provides mental and physical exercise, community networking, health information, and entertainment. Later, CASE will become a general home-based platform for wireless motion monitoring and telehealth. And because Aging-in-Place is itself multidimensional, we are embedding CASE in an expanding portfolio of services and activities including home renovation, transportation, volunteerism, and social services.

PERCEPTIONS OF PRIVACY IN LATER LIFE

L. Lorenzen Huber, *Indiana University, Bloomington, Indiana*

Ethical Technologies in the Homes of Seniors, NSF-funded research at Indiana University, is developing a framework describing the privacy needs of older adults using home-based ubiquitous technologies. Similar to findings in related research, participants exhibited less-than-expected concern about privacy. During focus group research, a participant commented, "I am very compliant about these kinds of things. I am not compliant with the thoughts of my mind, but I am compliant about following directions." Theories about late old age suggest that coping and adaptation is enhanced by passive mastery and selection and prioritization of important relationships. Our research suggests that late life coping and adaptation mechanisms promote unnecessary and potentially hazardous complacency and compliancy, particularly in regard to health and daily activity data. This session will discuss research methodology and technology design implications addressing late life complacency about privacy in home-based ubiquitous technologies.

SESSION 1990 (PAPER)

VIOLENCE, ABUSE, AND MISTREATMENT OF OLDER ADULTS

ASSOCIATION OF ELDER ABUSE AND MORTALITY IN A COMMUNITY-DWELLING POPULATION: THE ROLE OF COGNITIVE AND PHYSICAL FUNCTION

X. Dong¹, M. Simon², L. Hebert¹, D. Evans¹, *1. Rush University, Chicago, Illinois, 2. Northwestern Medical Center, Chicago, Illinois*

Background: Elder abuse is a public health and human rights issue. The association of elder abuse with mortality remains uncertain, especially among the frail population. We examined the associations of elder abuse with mortality and the associations of elder abuse with mortality across levels of cognitive and physical function. **Methods:** Prospective population-based cohort conducted from 1993-2005 of community-dwelling residents enrolled in the Chicago Health and Aging Project. A subset of these participants had elder abuse reported to protective services agency, which investigated and substantiated the cases. All-cause mortality ascertained during follow-up and the National Death Index. Cox proportional hazard models were used to assess the independent associations of elder abuse, both reported to and substantiated by the APS, with risk of mortality using time-varying covariate analyses. **Results:** Of 8,709 CHAP participants, 113 participants had been reported for elder abuse from 1993 to 2005. All CHAP participants were followed for a median of 6.1 years, during which 3,462 deaths occurred. After adjusting for confounders, reported elder abuse (HR, 1.62, 95%CI, 1.25-2.10) and substantiated elder abuse (HR, 2.38, 95%CI, 1.72-3.28) were associated with increased risk of mortality. Analyses including the interaction of elder abuse with physical performance tests indicate that the association of reported and substantiated elder abuse with risk of mortality was greater for those with higher levels of physical function. **Conclusion:** Both reported and substantiated elder abuse cases were associated with increased mortality risk. Mortality risk associated with elder abuse may be higher among those with higher levels of physical function.

MISTREATMENT AND PSYCHOLOGICAL WELL-BEING AMONG THE ELDERLY: EXPLORING THE ROLE OF PSYCHOSOCIAL RESOURCES

Y. Luo¹, L. Waite², *1. Sociology & Anthropology, Clemson University, Clemson, South Carolina, 2. University of Chicago, Chicago, Illinois*

This study examines the relationships among psychosocial resources, elder mistreatment, and psychological well-being using a representative sample of older adults aged 57 to 85 in the United States from the National Social Life, Health and Aging Project. It addresses three research questions: (1) Are older adults with fewer psychosocial

resources more likely to experience mistreatment? (2) Does experience of mistreatment have a negative effect on psychological well-being? (3) Do psychosocial resources buffer the negative impact of mistreatment on psychological well-being? Four types of mistreatment are examined (controlling behavior, verbal, financial and physical mistreatment). Psychological well-being is measured with global happiness and psychological distress scale. Psychosocial resources include self-esteem, marital/partner status, number of close friends and relatives, social support, feeling of loneliness and social activities participation. The results show that experience of mistreatment is associated with lower levels of positive support, higher levels of negative support, feeling of loneliness, and it has an inverse-U shape relationship with the number of close relatives and friends. The factors that are most salient for each type of mistreatment vary somewhat. Experience of mistreatment is associated with lower levels of global happiness and higher levels of psychological distress, and this association is explained in part by fewer psychosocial resources among the elderly who report mistreatment. There is also limited evidence for the buffering hypothesis—the associations between mistreatment and positive social support, feeling of loneliness, and social activities participation are particularly strong for the elderly who say they have been mistreated.

ELDER MISTREATMENT: PERCEPTIONS AND DEFINITIONS AMONG KOREAN AND CHINESE IMMIGRANTS

Y. Lee, *San Francisco State University, San Francisco, California*

Elder mistreatment (EM) has emerged as a serious public health problem affecting millions of elderly individuals. One of the greatest challenges in extant research is the lack of precise definitions to facilitate the reliable assessment of EM. Although sociocultural contexts significantly influence definitions about mistreatment, a paucity of data is available on Asian immigrant elderly. A qualitative study of 20 mistreated Chinese and Korean older adults and 5 focus groups with the general public and experts (N=40) examined definitions, perceptions, and meanings of EM in the San Francisco Bay area. The results of content analyses found that, in contrast to a common assumption that older Asian immigrants would have few issues around EM due to cultural emphases on filial piety and family harmony, EM has become a growing concern in both Korean and Chinese immigrant communities. In addition, the concept of EM is complex and intricately intertwined with the cultural values and beliefs about family obligation and responsibilities, such as caregiving and kin ties. The findings of this study showed that these beliefs influence how Chinese and Koreans perceive EM; and whom and at what point they might seek for help. The findings also demonstrate that elders' expectations of adult children have changed since migrating to the U.S. The findings suggest that there is a critical need in the area of EM, particularly with racial and ethnic minority populations. It is crucial to identify and develop culturally appropriate identification and intervention protocol in health care and social services for these populations.

ELDER ABUSE KNOWLEDGE AND TRAINING NEEDS AMONG GEORGIA'S CORONERS

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Background: A Georgia coroner—an elected or appointed official charged with the responsibility of investigating deaths that occur while unattended by a physician—is in a unique position to identify suspicious signs of abuse and neglect directed toward elders before a body is sent to a funeral home or crematorium. Unless there are blatant signs of foul play, a medical examiner may not become involved in a case. Scarce elder abuse research has focused on coroners' knowledge of elder abuse issues. **Methodology:** A 25-item electronic survey instrument was

administered to coroners registered in Georgia Coroners' Association Directory to elicit information on: a) the perceived knowledge that Georgia coroners have about elder abuse, and b) their perceptions about what information they need regarding the topic. Results: 63 out of 198 surveys were completed (31.8% response rate). Respondents were overwhelmingly male (84%) and Caucasian (90%). The mean age of respondents was 53 years. More than half of respondents indicated that they know 'almost nothing' or 'a little' about: distinguishing signs of physical abuse from signs of aging (57%) and about mandatory reporting laws and related elder abuse statutes (65%). When asked how often cases involving older adults were referred to the medical examiner for autopsy, 44% indicated 'rarely if ever'. Conclusions: Study results indicate that gaps exist between what coroners know and need to know regarding elder abuse. The study findings reveal specific opportunities for enhancing training efforts aimed at coroners who play a critical role in identifying and addressing elder abuse.

NEIGHBORHOOD TRAUMA: COMMUNITY RESPONSE TO MID AND LATER LIFE INTIMATE PARTNER HOMICIDE SUICIDE IPHS

S. Salari, *Dept. Family & Consumer Studies, University of Utah, Salt Lake City, Utah*

Intimate partner homicide suicide (IPHS) constitutes a violent end of life outcome. This research focuses on the community response to this event among mid and later life couples. Media reports often have commentary from witnesses, neighbors and police. These accounts inform the public about the couple characteristics, past behaviors and neighborhood impact. Quantitative and qualitative content analysis is used to examine 402 murder suicide events (830 deaths) among middle aged and elderly dyads from a national archive of news articles, transcripts, and police reports from 1999-2005. Dyads are compared by age of oldest member 1) elderly (age 60+, n=225) or 2) middle aged (age 45-59 n=177). Perpetrators were typically men (elderly 96% and middle aged 91%) and firearms were most often used (88% and 91%). Illness was more often cited for elderly (55%) than middle aged dyads (9%), but 30% of sick elderly couples had only a perpetrator who was ill. Suicide pacts and mercy killings (CDC) were rare (4% elderly and 1% middle aged). Themes emerged as neighbors often perceived elderly couples were "quiet" and "kept to themselves." The middle aged were more likely to have child victims and police or SWAT team involvement. Community reactions seem to correspond to primary perpetrator motives that were typically suicidal for elderly and homicidal for middle aged. Communities and neighborhoods were shocked, saddened and terrified by the violence, but accounts more often "romanticized" the motives of elderly perpetrators. Implications and risk of IPHS for neighborhoods and communities are discussed.

SESSION 1995 (POSTER)

ADULT PROTECTION/ ELDER ABUSE

DISASTER PREPAREDNESS FOR VULNERABLE ELDER: AN INTERDISCIPLINARY STUDENT TEAM COMPETITION

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It has been reported that worldwide a disaster occurs, on average, every 24 hours. Vulnerable elders, especially community dwelling elders, are at increased risk during and after disasters. Consequently, there is a need for disaster preparedness for community dwelling elders. The Houston Geriatric Education Center (HGEC) sought to educate health-care professional students about disaster preparedness for vulnerable elders by partnering with community agencies and sponsoring an Interdisciplinary Team Competition. The Competition consisted of two teams

encompassing thirty one students from three Universities, representing eleven disciplines including dental hygiene, dentistry, health informatics, medicine, nursing, occupational and physical therapy, pharmacy, public health and social work. In preparation for the Competition, students learned about disaster preparedness for the elderly via a web-based curriculum developed by a team of interdisciplinary faculty. Students also interviewed apartment managers and residents of senior housing complexes in the Houston area that were affected by Hurricane(s) Katrina, Rita and/or Ike. After three months of independent study and team work, both teams arrived at the Competition prepared to present their assessment of the problems encountered by the senior housing complexes and recommendations for the future. Each team presented before a live audience as well as interdisciplinary faculty judges representing the students' respective disciplines and an expert panel comprised of City of Houston officials who work closely with the vulnerable elder population and citywide disaster preparedness. Teams were judged on their assessment and recommendations. The team with the most comprehensive, feasible, and interdisciplinary approach was declared the winner.

CARING FOR VULNERABLE ELDER REPORTED TO ADULT PROTECTIVE SERVICES FOR SELF-NEGLECT: A MULTI-DIMENSIONAL APPROACH

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Background: Vulnerable elders reported to Adult Protective Services (APS) for self-neglect, often suffer from multiple co-morbid conditions with associated cognitive, functional and affective impairments. No studies exist assessing the effectiveness of a comprehensive geriatric assessment and intervention (CGAI) with usual APS care for self-neglecters. We assessed the utility of a CGAI with APS care for this population. Methods: We conducted a retrospective chart review using clinical data collected by the Texas Elder Abuse and Mistreatment Institute (TEAM). Self-neglecters were assessed using standardized CGAI tools at baseline and 6-months. Assessments were completed in patient's homes or in the Harris County Hospital District's geriatric outpatient clinic. Dependent sample's t-tests were computed to assess changes in baseline and 6-month CGAI scores. Results: One-hundred and sixteen self-neglecters aged 50 years or older (M = 76.9+/-9.6, min = 50, max = 100) with baseline and 6-month follow-up data are included. Statistically significant improvements in baseline and 6-month scores were detected for depression (Mean = 0.750, 95% CI = 0.162 to 1.32), functional ability (Mean = -2.2, 95% CI = -3.56 to -0.886), psychiatric health (Mean = 2.3, 95% CI = 1.09 to 3.53), executive function (Mean = -0.172, 95% CI = -0.332 to -0.013) and self-rated health and mortality (Mean = -0.284, 95% CI = -0.544 to -0.025). Conclusion: These preliminary data support utilizing a multi-dimensional assessment approach to care for vulnerable elders reported to APS for self-neglect. Further studies are necessary to parse out the effects of this approach versus usual care performed by APS.

PREVENTING ELDER INVESTMENT FRAUD AND FINANCIAL EXPLOITATION: RESULTS OF DEVELOPING A CONTINUING EDUCATION PROGRAM ON EIFFE

R. Roush, A. Naik, G. Taffet, N. Wilson, M.E. Kunik, L. McCullough, *Baylor College of Medicine, Houston, Texas*

Cognitive impairment is very common in those over 70 years of age and markedly increases the chances of making errors on financial matters. Furthermore, cognitive impairments increase their vulnerability to undue influence, usually via wrongful use of power of attorney.

Unscrupulous financial advisors and family members exploit cognitively impaired elders at a prevalence rate estimated at 3.5%. As the population continues to age and, perhaps, the economy continues to flounder, the problem of Elder Investment Fraud and Financial Exploitation (EIFFE) will grow larger. With a grant from the non-profit Investor Protection Trust, the authors undertook the challenge of developing and implementing an educational program to alert health care providers to address EIFFE. A series of ten statewide 2-hour CME programs was attended by 260 primary care/human service providers composed of 40% physicians, 15% nurses, 20% social workers, 10% rehabilitation professionals (PTs and OTs), 10% LTC administrators, plus 5% others. A key part of the program included a Clinician Pocket Guide that provides "red flags" in a patient's history that suggest vulnerability to EIFFE. Nearly all participants reported that the pocket guide would be very useful in their practice, giving the program and materials high utility ratings. A sample of practitioner attendees will be selected for follow-up to determine the impact of the educational program in their practices. Knowledge and prevention of EIFFE is critical, as older victims of investment fraud and other forms of financial exploitation generally lack the means or time to recover financially from the losses they incur.

SESSION 2000 (SYMPOSIUM)

BO DIDDLEY TRACK: AGING AND THE BLUES- MORE THAN JUST THE MUSIC

Chair: *D. Sheets, Health Sciences, CSU Northridge, Pine Mountain Club, California*

The Bo Diddley Track will showcase two performers with the intent to get beyond the music and provide an intimate look at the life and struggles of older minority blues musicians. This session provides insight into the "real world" of minority aging, in a way that does not minimize the ravages of the decades of prejudice which they were subject to, yet provides gerontology professionals an appreciation of the great spirit, unrivaled vitality and energy, and the enormous creativity and dedication of the featured musician. Sandra Hall, a powerful blues vocalist with more than 50 years' experience singing the blues is known as the "Empress of the Blues". Hall began singing at the age of 4 at her grandmother's fish fry in Atlanta. In the 1960's her all-girl group, The Exotics, performed blues tunes as an opening act for legendary musicians like Jackie Wilson, B.B. King, the Temptations and Otis Redding. Her knockout shoutin' style has been compared to Koko Taylor, Big Mama Thornton, or Etta James. Tommy Brown is a legendary blues singer whose classic blues recordings, include his 1956 Billboard #1 hit "Weepin' & Cryin'". After 60+ years in show business, Tommy Brown is still recording and performing. Both musicians will perform at Blind Willies, voted 1997 "blues club of the year". It is Atlanta's home to great live blues music in an intimate setting and only a couple miles from the conference hotel. Remember, we're on a mission from God...

SESSION 2005 (POSTER)

END OF LIFE - HS POSTER SESSION

THE EXPERIENCE OF FAMILY CAREGIVERS OF ASSISTED LIVING RESIDENTS ENROLLED IN HOSPICE

M.A. Volpin, T.A. Harvath, School of Nursing, Oregon Health & Science University, Portland, Oregon

The fastest growing residential care setting for frail older adults is the assisted living facility (ALF), which has seen a 14.5% increase in capacity between 2000 and 2001. More and more of these adults are making ALFs their last home: nationally, one-third of residential care/assisted living residents remain in their residence until death, with annual turnover rate due to death between 16% and 28%. Family caregivers are often crucial to residents being able to die in their ALF home,

but there is limited information available regarding the nature of the family involvement, or empirical data from the family caregiver perspective. Utilizing family caregiver interviews and observation of the family caregiver and the ALF resident, this study explores the experience of family caregivers of assisted living facility residents enrolled in hospice. Among the issues examined were the expectations that family members have of themselves and the hospice and ALF providers; the nature and scope of family caregiver care activities; the factors that facilitate family caregivers providing care; their challenges to providing care; and the positive and negative impact of providing such help. The knowledge gleaned from this study can inform the development of policy and programs to support good end-of-life care in ALFs.

PREFERENCES OF OLDER ADULTS IN THE COMMUNITY AND IN NURSING HOMES FOR LIFE-SUSTAINING TREATMENTS

L.W. Suen, Department of Nursing, The Chang Jung University, Gueiren, Tainan., Taiwan

This study compares the preferences of community-dwelling older adults and nursing home residents for four life-sustaining treatments (antibiotics, CPR, surgery, and artificial nutrition) under eight hypothetical health scenarios for 32 conditions. The cross-sectional study included 95 community-dwelling Taiwanese older adults and 100 Taiwanese nursing home residents. The older adults in the community were 60 to 90 ($M = 70.8$, $SD = 8.8$), 45% were male and 54% female, and 37% rated their health as bad and very bad. The nursing home residents were 60 to 101 ($M = 80.16$, $SD = 8.37$), 33% were male and 67% female, and 41% rated their health as bad and very bad. For the community-dwelling older adults, the five most desirable life-sustaining treatments included antibiotics or artificial nutrition and were rated from 2.95 to 3.53 with 1 being definitely unwanted and 5 definitely wanted; for the nursing home residents, the five most desirable life-sustaining treatments all included artificial nutrition and were rated from 4.03 to 4.10. The 5 least desirable life-sustaining treatments involved surgery or CPR for both groups, and were rated from 1.72 to 1.89. In 12 out of the 32 conditions (37.5%) nursing home residents rated significantly higher desirability for antibiotics and artificial feedings than community-dwelling older adults. Self-reported health was significantly correlated with desire for surgery in 6 of the 8 health scenarios in nursing home residents and correlated with all four treatments in emphysema for the community-dwelling older adults. Age was not significantly correlated with desirability of life-sustaining treatments in both groups.

INFORMAL CAREGIVING AT THE END-OF-LIFE: INTERFACING WITH HEALTHCARE PROVIDERS DURING CLINIC VISITS

J. Penrod, J.E. Hupcey, P.C. Spigelmyer, P.Z. Shipley, J. Thurheimer, B. Baney, Penn State School of Nursing, University Park, Pennsylvania

This study illustrated key characteristics of clinic-based care settings that influence the caregiving experience in three distinct death trajectories. Ethnographic methods, including extended observations and brief interviews with key informants were used. Data were collected in three clinics serving patients with Lung Cancer, Heart Failure, and Amyotrophic Lateral Sclerosis through an extended immersion of non-participant observers. Four key elements of the culture of care were identified as influencing the caregiving experience: Role of the Health Care Provider, Conceptualization of the Patient System, Focus of Visit, and Flow of Care. Within-clinic patterns reveal close correspondence to prevalent models of death trajectories. Across-clinics analysis reveals significant variations that must be addressed when planning interventions to enhance supportive care for informal family caregivers providing end-of-life care. The culture of care inherent to a care delivery setting is quite powerful in shaping the experiences of family caregivers and warrants thoughtful consideration.

MEDICATION USE AMONG NURSING HOME RESIDENTS WITH ADVANCED DEMENTIA

M.D. Rothman^{1,2}, J. Tjia³, D.K. Kiely^{2,4}, S.L. Mitchell^{2,4}, 1. *University of New England College of Osteopathic Medicine, Department of Geriatrics, Biddeford, Maine*, 2. *Hebrew Senior Life Institute for Aging Research, Boston, Massachusetts*, 3. *University of Massachusetts Medical School, Division of Geriatric Medicine, Worcester, Massachusetts*, 4. *Beth Israel Deaconess Medical Center, Division of Gerontology, Boston, Massachusetts*

Background: Many commonly prescribed chronic medications provide questionable benefit to nursing home (NH) residents with advanced dementia. A recent consensus panel categorized selected medications as 'never appropriate' with this condition.¹ **Objectives:** 1. To describe chronic daily medication use in NH residents with advanced dementia; 2. To identify and describe factors associated with the use of medications characterized as 'never appropriate' in this population. **Methods:** In a prospectively followed cohort of 323 NH residents with advanced dementia, daily medication use and other data were collected at baseline, and quarterly for up to 18 months. Multivariate logistic regression was used to identify factors associated with use of 'never appropriate' medications during the follow-up period. **Results:** Over 18 months, residents took a mean of 6.0 daily medications. The proportion of residents taking medications of questionable benefit included: anticholinesterase inhibitors or memantine, 22%; proton-pump inhibitors, 28%; osteoporosis medications, 32%; and lipid-lowering agents, 12%. Thirty-eight percent of residents were prescribed medications deemed 'never appropriate'. Factors independently associated with taking 'never appropriate' medication included: male, shorter NH stay, better functional status, diabetes, and the lack of do-not-hospitalize order. **Conclusions:** Prescribing patterns among NH residents with advanced dementia, should be guided by the goals of care to help avoid the burden and cost of inappropriate medication use.¹ Holmes et al. *J Am Geriatr Soc*. 2008; 56:1306-1311. Never Appropriate includes lipid-lowering drugs, NMDA receptor antagonist, cytotoxic chemotherapy, antiplatelet agents, hormone antagonists, leukotriene receptor antagonists, sex hormones, acetylcholinesterase inhibitors and antiestrogens

SESSION 2010 (PAPER)

EPIDEMIOLOGY- INTERNATIONAL

LOWER EXTREMITY FUNCTION, TOTAL MORTALITY, AND MEDICAL AND CARE EXPENDITURES IN JAPANESE ELDERLY

H. Yoshida, Y. Fujiwara, T. Fukaya, H. Amano, N. Watanabe, L. Sangyoon, M. Nishi, S. Shinkai, *Tokyo Metropolitan Institute of Gerontology, Tokyo, Japan*

This study examined the impact of lower extremity function on total mortality and medical and long-term care expenditures in Japanese older adults. The subjects were those aged ≥ 70 years ($n=512$) who participated in the baseline health-check (2002) in Kusatsu, Gunma, Japan. Out of them, 401 individuals (78.3%) underwent the tests of usual walking speed and length of time standing on one leg with eyes open, and were followed up until the end of October 2005 (3.3 year-period). We classified the subjects into the lowest, middle and highest score groups of lower extremity function (higher the score, higher the function) according to a composite score derived from the two tests. Then we compared the period to death and accumulated medical and long-term care expenditures among the groups over the course. Cox proportional hazard models were used to examine the independent association between baseline lower extremity function and total mortality, controlling for age, gender, important medical conditions, self-rated health and generic mobility level. During the follow-up period, 25 subjects (6.2%) died. Compared with the highest score group, the lowest group showed significantly higher risk for total mortality (adjusted hazard ratio, 6.54;

95% CI, 1.95-21.99), and exhibited significantly higher medical and long-term care expenditures per capita per month. Lower extremity function is not only a risk for total mortality but also for higher medical and long-term care expenditure in Japanese older adults.

PREDICTORS OF QUALITY OF LIFE AMONG URBAN COMMUNITY ELDERLY IN KOREA

H. Kim, A. Kim, *Inje University, Pusan, Korea, South*

Because, in Korea, there has been increased numbers of elders with a poverty and social isolation, health professionals have recently focused on quality of life among community elders. According to prior studies, their socio-environmental characteristics and psychological status affects quality of life as well as physical health status. This study conducted to identify the predictive relationship between predictors such as psychological, socio-environmental, and physical health status and quality of life among urban community elders in Korea. This is a descriptive study using cross-sectional design. The subjects for this study were 153 elders by quota sampling from 16 areas of one metropolis in Korea. The subjects ranged in age from 60 years to 97 years and the mean age was 72.83 (SD=5.56). 64.7% were women, and 35.3% were men. 40.5% were living with spouses. Data collection was performed by 3 of trained interviewers individually in elderly association members under Korea National Red Cross from January to March, 2009. Quality of life by Andrew, perceived loneliness by revised UCLA Loneliness scale for psychological status were measured. IADL, Family relationship, Home environment for socio-environmental status, and Physical symptom for physical health status were used standardized form by Ministry for Health, Welfare and Family Affairs in Korea. Hierarchical multiple regression model was used to examine the relationship between quality of life and its' predictors. Demographics such as age and gender, psychological factors such as perceived loneliness, and socio-environmental status such as IADL, family relationship, home environment, and physical health status such as physical symptom significantly explained 55.6% of the total variance of quality of life ($F=14.7$, $P=.000$). Perceived loneliness ($\beta=-.297$, $P=.001$) was the most significant predictor of quality of life ($\beta=-.438$, $P=.000$). Family relationship ($\beta=.251$, $P=.004$) was the second most significant correlated variable of quality of life. Gender ($\beta=.182$, $P=.011$), physical symptom ($\beta=-.168$, $P=.032$), home environment ($\beta=.160$, $P=.032$) had effects on quality of life. Through this finding, it can be concluded that severe perceived loneliness, worse family relationship, female elderly than male elderly, more physical symptom, and less comfortable home environment will affect quality of life of urban community elders in Korea negatively.

THE IMPACT OF SEVEN CHRONIC CONDITIONS ON SELF-RATED HEALTH AMONG DUTCH 57- TO 97- YEAR-OLDS

H. van der Ploeg¹, A.W. Braam^{2,1}, D.J. Deeg¹, 1. *VU University Medical Center, Amsterdam, Netherlands*, 2. *Altrecht Mental Health Care, Utrecht, Netherlands*

Objective: Self rated health (SRH) is a strong predictor of health care use, morbidity, and mortality. This study aims to further clarify this relationship by examining the impact of seven chronic conditions as well as comorbidity on SRH. **Methods:** Cross-sectional data were used from 1907 men and women (age 57-97), who participated in the Longitudinal Aging Study Amsterdam (LASA). The presence of the following chronic diseases or disease events was assessed: chronic nonspecific lung disease, cardiac disease, peripheral atherosclerosis, stroke, diabetes mellitus, arthritis and malignancies. For assessing comorbidity, up to two additional chronic diseases were included, if mentioned by the respondent. SRH was measured by the question: How is your health in general? Response categories were 'very good', 'good', 'fair', 'sometimes good and sometimes poor', and 'poor'. Poor SRH was defined as a response in one of the last two categories. Prediction models were made using logistic regression. **Results:** Chronic nonspecific lung disease (OR=6.42, $p<.05$), diabetes mellitus (OR=7.28, $p<.05$) and arthri-

tis (OR=8.23, $p<.001$) increased the odds for reporting poor SRH. For each of the seven conditions, comorbidity affected SRH in a similar way. For example, persons with cardiac disease and one additional chronic disease had a greater chance (OR=15.5, $p<.001$), and persons with more than one comorbidity had an even greater chance of reporting poor SRH (OR=50.4, $p<.001$), compared to persons without chronic disease. Implications: Having one chronic disease does not necessarily affect SRH. For every condition likewise, comorbidity has a far more adverse effect on self-rated health.

THE USE OF ASSISTIVE DEVICES AND CHANGES IN SELF-RATED HEALTH IN 55-64-YEAR-OLDS IN THE NETHERLANDS

D.J. Deeg, C. Boons, K. van de Kamp, *LASA, VU University Medical Centre, Amsterdam, Netherlands*

Background. Disability has been shown to be an important determinant of self-rated health (SRH), thus strategies to reduce disability may be related to SRH as well. Since the use of assistive devices (AD) is intended to reduce disability, it may be expected that AD use is associated with a positive change in SRH. However, AD use represents aging, and may thus be associated with a negative change in SRH, particularly in young-old individuals. This study aims to examine how (initiating and continuing) AD use affects change in SRH among 55-64-year-olds. **Methods.** Data are used from two national cohorts aged 55-64 years (baselines 1992 and 2002) included in the Longitudinal Aging Study Amsterdam with 3-year follow-up ($n=1968$). The effect of AD use on change in SRH was examined taking into account demographics and level of disability. **Results.** At baseline, AD-users had poorer SRH than non-AD-users. Over time, continued AD use was associated with an improvement in SRH. Although disability increased over time, SRH did not show significant change in those initiating AD use. Although the 2002 cohort showed a higher disability prevalence (17% vs 9%) and higher AD use (11% vs 6%) than the 1992 cohort, cohort membership did not affect the association of AD use with SRH. **Conclusions.** The initial negative effect of AD use on SRH subsides over time in continued users of AD. In those initiating AD use, SRH remained stable despite increasing disability, which positive finding may be attributed to the use of AD.

COLLECTIVE EFFICACY AND DEPRESSIVE SYMPTOMS IN MID-LIFE AND BEYOND

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This prospective study examined the relationships between perceived neighborhood-based collective efficacy and subsequent depressive symptoms in over 6000 participants of the English Longitudinal Study of Aging 50+. High versus low collective efficacy at baseline (operationalised using two items capturing informal social control and two capturing social cohesion) was associated with reporting fewer CES-D depressive symptoms at follow-up independent of demographic and socioeconomic factors and baseline depressive symptoms. Structural equation modeling was then used to examine explanatory pathways behind these associations. This revealed that personal sense of control was a mediating factor. Further, although friendship quality was associated with collective efficacy it was only weakly associated with depressive symptoms, conditional on all other covariates. The study provides a contextual perspective on social relations and health among older people, indicating that better mental health, greater sense of control and better quality friendships are found in environments seen to be characterized by higher collective efficacy.

SESSION 2015 (PAPER)

FALLS RISK II

TO CHANGE OR NOT TO CHANGE: FALL HISTORY AS A PREDICTOR OF RESIDENTIAL ADJUSTMENTS

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The objective of this study was to examine the longitudinal relationship between fall history and the decisions to make residential adjustments among a nationally representative community-based older adult sample. Data from the Health and Retirement Survey (HRS), wave 4 through wave 7 (1998-2004) were used resulting in 25,036 person-wave observations. Fall history was classified based on the number of falls and the occurrence of an injury due to the fall. The sample was 55.4% female (mean age 74.9). Seventy-three percent reported no history of falls, 8.5% reported one fall with no injury, 8.9% reported more than one fall with no injury, and 9.6% reported at least one fall resulting in an injury. The residential adjustment outcome analysis incorporated a two part decision process: the decision to make any adjustment or not, and secondly what type of adjustment was made. The variable distinguishing the type of residential adjustment made was defined hierarchically and included four categories: 1) increasing assistance with ADLs or IADLs, 2) increasing familial support, 3) moving or making structural modifications to the current environment, or 4) increasing the use of adaptive equipment. Multinomial logit regression analysis suggests as fall history increases in severity, the odds of making any residential adjustment increases. Individuals reporting at least one fall resulting in an injury at baseline, compared to non-fallers, had higher odds of increasing assistance with ADLs or IADLs (OR=1.35) and higher odds of increasing the use of adaptive equipment (OR=1.54), relative to otherwise similar individuals increasing proximity of family support.

DEVELOPMENT OF A FALL RISK QUALITY INDICATOR FOR NURSING HOME RESIDENTS WITH DEMENTIA

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Nursing home quality indicators (QIs) are being used to structure financial incentives for nursing home quality and to inform the public about care quality. Yet, many publically reported QIs do not adequately adjust for dementia as a QI risk factor nor do they offer guidance for improving the quality of dementia care. We examined risk of new falls, a publicly-reported NH QI in Minnesota, according to level of resident cognitive impairment, residence on an Alzheimer's or conventional unit, and covariates. The analysis was conducted using Minimum Data Set Assessments (MDS) from 21,587 residents in 380 Minnesota nursing homes in the 4th quarter 2008. The rate of new falls was significantly higher for residents with mild to moderate cognitive impairment compared to the cognitively intact or severely impaired even when controlling for other risk factors. Behavioral symptoms put residents at greater risk for falling, and psychotropic medications further increased the risk. Restorative care (range of motion) reduced incidence of falls. Finally, the rate of new falls was higher on Alzheimer special care units (SCUs) than on conventional units, probably resulting from placement of higher risk residents on SCUs. Public reporting of the falls QI should take into account level of CI and unit placement in order to make fair and accurate assessments of care quality in facilities focusing on dementia residents. Also, quality improvement programs should target dementia residents with clinical and functional conditions that increase the risk of falls, and should promote care processes that decrease the risk of falls while avoiding those that increase fall risk.

MY LIFE IS WORTH SOME RISK: A QUALITATIVE METASUMMARY OF ELDERS' VIEWS OF FALLS AND FALLING

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Falls are the major cause of injury-related death and disability for persons age 65 years or older. Current fall prevention interventions are designed around the concept of risk. However, elders' uptake and adherence to professional recommendations for modifying fall risk is modest. Thus, older adults "at risk" for falls may be contesting the salience of this concept as a primary framework for elder-centric fall prevention strategies. Problematically, most risk factor profiles were developed without advice from older adults, while few interventions have taken into account the myriad meanings of falls from the perspectives of people who have experienced one. This presentation reports a metasummary of qualitative studies conducted with older adults with a history of falling. Research published from 1990-2008 in English language journals and in which findings focused on elders' perceptions of falling was included. Studies conducted only with family caregivers or health professionals were excluded. The bibliographic sample included 25 research reports from such disciplines as aging studies, geriatrics, nursing, occupational and physical therapy, psychology, and public health. The majority of studies were conducted with samples of older white females in English-speaking nations (UK, USA, Australia, Canada). A few studies were conducted with more gender equitable samples (UK, Taiwan, China). This presentation highlights extracted findings from published reports as well as frequency patterns and estimated effect sizes. Themes include personal competence, inevitability, common sense, "other people", caution, independence, integrity, courage, and connection. Recommendations for incorporating elders' views of falling into fall prevention programs are suggested.

DEVELOPMENT OF A FALL RISK SELF-ASSESSMENT FOR SENIORS

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Aim/Purpose: Falls are a major public health problem for older adults, but fall risk may go unrecognized. Our objective was to design a self-administered fall risk self-assessment brochure targeted to the general knowledge and readiness to change of community-dwelling seniors to encourage risk reduction behaviors. **Methodology:** A qualitative approach was used: 1) Focus groups with seniors to identify knowledge, perceptions and attitudes about fall risks and risk reduction (Phase I) and to assure user-friendliness of the evidence-based self-assessment tool (Phase II). **Findings/Results:** Phase I: Three focus groups were conducted. Participants (n=19) recognized that muscle weakness was a key indicator of fall risk. Although a positive tone was perceived as a key motivator for fall prevention, a high level of threat (e.g., nursing home placement) was also discussed and considered motivational. Phase II: Four focus groups were conducted. Participants (n=19) preferred that self-assessment items be linked to evidence-based facts to clarify the question's intent, as well as provide targeted education. They rejected printed statements about negative consequences as failing to inspire motivation to change and requested more information about risk reduction activities. Participants found the brochure most useful to stimulate discussions about falls with healthcare providers and with their community. **Conclusion/Recommendation:** The risk-assessment/reduction brochure may provide a low cost way to improve fall risk assessment, encourage seniors to discuss fall risks with healthcare providers, and stimulate preventative activities. Further research is needed to validate the self-assessment instrument.

HOW DO MEDICATIONS INCREASE FALL RISK?

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Contradictory results in studies of the association between medications and falling predominate when drugs grouped for analysis represent diverse pharmacologic mechanisms. Three candidate mechanisms of drug-related falling are muscarinic blockade ("anticholinergic"), sedation, and orthostatic hypotension. The purpose of this pilot study was to ascertain relative contributions of pharmacologic mechanisms to imbalance, fear of falling, and fall events. Using longitudinal, descriptive, correlational design, a sample of 47 adults >70 years (mean 78.3years; 75% female) taking medications associated with falling were assessed on predictor variables of demographics, functional status, depression (GDS-SF), cognitive function (MMSE), postural hypotension, sedation (MRS, DSST) and anticholinergic burden score. Dependent variables were postural sway, dynamic balance, and fear of falling (MFES). Fall events were ascertained by diaries and telephone interview. On univariate analysis fall events were associated with sedation ($p=.05$) and history of falling ($p<.001$). Fear of falling was associated with sedation ($r=.45$; $p<.001$) and postural hypotension ($r=.35$; $p<.05$). Balance was associated with sedation ($r=.047$; $p<.001$), while postural hypotension was associated with sway ($r=.30$; $p<.05$). Neither cumulative anticholinergic burden nor highest potency were associated with fall events. In multivariate analysis imbalance was predicted by postural hypotension and use of anticholinergic drug(s) ($R^2=22\%$, $p<.05$). The only predictor of incidence of fall events was DSST sedation ($R^2=14\%$, $p=.039$), while age, MRS and postural hypotension predicted fear of falling ($R^2=50.2\%$; $p<.001$). Results suggest health care providers should assess for postural hypotension and minimize the anticholinergic and sedative burden of medication regimens. Funded by NIH R15NR05136.

SESSION 2020 (POSTER)

FAMILY CAREGIVING - HS POSTER SESSION

ASSESSING A SPECIAL CARE UNIT FROM THE PERSPECTIVE OF FAMILY MEMBERS

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INTRODUCTION: Prosthetic units suggest that families are essential care partners. However, no evaluative study has, so far, taken an interest in their level of satisfaction concerning the care provided to their loved ones as well as what is expected from the families themselves. **OVERALL OBJECTIVE:** To assess, according to the family's perspective, a prosthetic unit (PU) for the elderly with cognitive impairment and behavioural and psychological symptoms associated with dementia (BPSD). **SPECIFIC OBJECTIVES:** 1) Describing this unit's components. 2) Determining how these components have an influence on the family's engagement and satisfaction. **METHODOLOGY:** An intrinsic case study is currently under way. The institutional documents given to the families and the staff will be reviewed (objective 1). The EPO questionnaire (Physical and Organizational Environment), developed and validated in Quebec, will document the environmental component. Moreover, a group interview is scheduled with eight staff members and a second one with the person responsible for the unit. Individual interviews with caregivers will be held (objective 2). They will be selected according to their loved ones' functional autonomy profile. Interviews will be recorded and transcribed for analysis. Triangulation of the data will provide a thorough description of the unit. **OUTCOME:** A presentation will be held on the unit's components, the care approach and themes emerging from the families' point of view concerning their satisfaction and perception of their allocated role. **CONCLUSION:** This

research should bring forward suggestions to improve the quality of life of these seniors and their families.

FAMILY QUALITY OF LIFE IN DEMENTIA: QUALITATIVE APPROACH TO FAMILY-IDENTIFIED CARE PRIORITIES

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Assessing quality of life (QOL) in dementia is difficult. Individuals with dementia often possess limited insight, leading them to self-rate QOL differently from those who care for them. Many outpatients with dementia receive care in a family unit, but measures of whole-family QOL have not been widely implemented in the dementia population. The concept of family quality of life (FQOL) has been validated among families caring for children with developmental disabilities. FQOL measures have the potential to improve determinations of effectiveness in dementia care. Fifty-four questionnaires requesting information on priorities for care were collected from families of patients obtaining interdisciplinary care at an academic dementia clinic. Patients, family members, or both, completed the forms. The patients' mean age was 73.6 years; 61% were women. Two evaluators conducted qualitative analyses of the responses, assigning comments to five domains validated for FQOL in developmental disability families. Ten additional cases were previously used to define criteria for domain assignments. Both evaluators rated a validation sample (11 cases) to enhance inter-rater reliability. Five domains were identified: 1) Family Interactions, 2) Direct Care/Activities of Daily Living Support, 3) Emotional/Behavioral Well-being, 4) Physical/Cognitive Well-being, and 5) Disability-related Support/Medical Care. Not surprisingly for scheduled medical encounters, nearly all families expressed medical care inquiries and requests. Families identified concerns about physical and cognitive well-being nearly as often. Issues regarding family interactions and emotional well-being were rarely raised. An FQOL model designed for developmental disabilities provided useful information for qualitative characterization of priorities among families involved in dementia caregiving.

ADAPTATION AND EVALUATION OF PROBLEM SOLVING THERAPY FOR THE PREVENTION OF DEPRESSION IN FAMILY CAREGIVERS OF PERSONS WITH MILD COGNITIVE IMPAIRMENT (MCI)

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Background: Persons with MCI are at high risk to progress to dementia. At the stage of MCI, their family members begin to adopt caregiver roles as they cope with this condition. Because these family members are in the earliest stages of caregiving, the timing is ideal for implementing selective prevention strategies in order to protect their mental health in the face of their family member's illness and their growing caregiving responsibilities. **Methods:** Phase I involved adapting and manualizing problem solving therapy (PST) for depression prevention in this population of new caregivers, and developing content for a suitable comparison condition (nutritional education). Phase 2 involved implementing a randomized controlled trial to evaluate the effectiveness of the PST intervention on family caregiver mental health outcomes one, three, six, and 12 months' post-intervention. **Results:** In Phase I, a nine-session PST-adapted intervention was tailored to the unique needs of individuals caring for a person with MCI. A similar approach was taken for developing a suitable comparison condition. In Phase II, 61 subjects have been enrolled and randomized to date (target N = 165). Primary outcomes are depressive symptom levels and the development of diagnosable mood disorders. We will present baseline demographic, psychiatric, and caregiver burden data to date. **Conclusions:** PST can be adapted and utilized with this population of new caregivers. Caregivers are willing to enroll in our study and early data suggest that it is not too early to intervene with this population of caregivers.

SESSION 2025 (PAPER)

FRAILTY

PHYSIOLOGICAL REDUNDANCY IN OLDER ADULTS IN RELATION TO THE SLOPE OF A CLINICALLY DERIVED FRAILITY INDEX WITH AGE

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Background: The clinical operationalization of a Frailty Index based on the items recorded in a Comprehensive Geriatric Assessment (FI-CGA) potentially offers the ability to precisely grade frailty from routinely collected clinical data. One test of the precision of the FI-CGA is whether accumulation of deficits results in loss of redundancy. This would be reflected by attenuation in the slope of a Frailty Index with age, as is seen in representative population-based studies using the Frailty Index. **Methods:** In a secondary analysis of data from the clinical sample from the second wave of the Canadian Study of Health and Aging, we were able to calculate an FI-CGA for 2305 people aged, 70 years older at baseline. **Results:** At the 25th percentile of deficit accumulation, the slope of the FI-CGA in relation to age was 0.044 (0.038-0.049). At the 75% value, the slope was 0.021 (0.016-0.027). By the 90th percentile, the slope had become statistically indistinguishable from 0. An age-invariant limit to deficit accumulation was demonstrated at an FI-CGA value of about 0.7. **Conclusion:** As predicted by the reliability theory of aging, the rate of deficit accumulation slows with increasing frailty. A Frailty Index derived from data routinely collected as part of a Comprehensive Geriatric Assessment can estimate loss of redundancy in older adults.

RESISTANCE TRAINING WITH OR WITHOUT NUTRITIONAL SUPPLEMENTATION OF SOY-PEPTIDE FOR THE FRAIL ELDERLY

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It remains still controversial whether nutritional supplementation has any additive effect for improving frailty in older adults over resistance training alone. We conducted a randomized controlled trial to examine whether the supplementation of soy-peptide enhance the effects of resistance training for the community-dwelling frail elderly. The subjects comprised 33 older adults who had reported one or more fall experiences in the previous year (designated as "fallers"), and 50 older adults who had been identified to have two or more geriatric syndromes among fall experience, urinary incontinence, disability in one or more items of five instrumental activities of daily living, and lower frequency of going outdoors (designated as "multiple-geriatric syndrome"). Within each subgroup, they were randomly allocated into exercise group and exercise plus nutritional supplementation group. Both groups participated in supervised resistance training class, two times per week, one hour each for 12 weeks. During this period the nutritional supplementation group was given soy-peptide beverages which were equivalent to 32 g soy protein intake per week. After the 12-week intervention, the exercise plus nutritional supplementation group within the fallers showed significantly greater improvement in knee-extension power and usual walking speed, and greater reduction of white blood cell counts. However, no significant additive effect of supplementation was found in the multiple-geriatric syndrome subgroup. Supplementation of soy-peptide may enhance the effect of resistance training in a certain subset of the frail elderly.

A COMPARATIVE GLYCOPROTEOMICS APPROACH TO FRAILITY USING LECTIN AFFINITY CHROMATOGRAPHY: A PILOT STUDY

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Background: The geriatric syndrome of frailty is associated with physiologic dysregulation in many physiologic systems; however, its etiology is poorly understood. Proteomics biotechnology allows the study of hundreds of plasma proteins. To date, physiologic alterations associated with frailty have almost exclusively demonstrated modifications in glycoproteins. The purpose of this study is to determine if pre-frailty is associated with changes in the expressed plasma glycoproteome, which might provide direction for future research identifying creative interventions for healthy aging. **Methods:** Subjects were age and sex-matched pre-frail (n=4) and non-frail (n=4) community-dwelling older adults (mean age 81 ±5.6 years, 50% female). Pre-frailty was defined as two of 5 criteria: weak grip, slow walk, weight loss, exhaustion, and low physical activity. Approximately 200 glycoproteins were isolated using Concanavalin A, wheat germ agglutinin, and Jacalin lectins affinity columns, were separated with 2-dimensional polyacrylamide gel electrophoresis, and stained with Sypro ruby for quantification. Relative spot intensities were estimated using PDQuest; those showing ≥2-fold difference by group were identified using mass spectrometry. **Results:** Five glycoproteins or their isoelectric isoforms were upregulated in pre-frail compared to non-frail individuals (transferrin, N-terminal haptoglobin, haptoglobin, and kininogen-1 variant). Five were down-regulated (hemopexin precursor, kininogen-1 variant, fibrinogen isoform, apolipoprotein E, and lucentin rich alpha-2-glycoprotein 1). **Conclusion:** Differential expression of several glycoproteins related to inflammation and the hematologic system was found at the pre-frailty stage, before frailty becomes clinically apparent. These findings may suggest the feasibility of this methodology for discovery of potential biomarkers for frailty and earlier identification of at-risk older adults.

A FRAILITY INDEX FOR OLDER CARDIOVASCULAR PATIENTS CONSISTING OF PHYSICAL, COGNITIVE, EMOTIONAL AND SOCIAL DOMAINS

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Introduction: Frailty in later life is attracting growing clinical and research interest. However, its operationalization often excludes domains that are arguably part of the construct. We combined measures from physical, cognitive, emotional, and social domains to develop a brief frailty index. **Methods:** We used data from a prospective study of 374 patients over 60 years old (73% males) who had undergone cardiac catheterization. Twelve potential criteria were modeled on functional disability at twelve months post revascularization procedure using Poisson regression with a log link and Pearson scale. We constructed an index from the best-fitting model variables and quantified its predictive accuracy using area under the ROC curve (AUC). Using the frailty index, we estimated the twelve-month risks of increased disability, decreased health-related quality of life (HRQOL), and further revascularization procedure/death. **Results:** The 5 best-fitting criteria in the model were poor balance (risk ratio (RR)=2.36), body mass index above 30 or below 21, (RR=1.77), executive dysfunction (RR=2.34), depressive symptoms (RR=1.83), and living alone (RR=2.19). The model with 5 criteria as separate variables and the 5-criteria frailty index yielded identical AUC, 0.76 (95%CI 0.66,0.84). Patients with 3+ criteria (compared to none) were at greater risk for increased activities of daily living disability, (RR=10.39, 95%CI 4.33,24.91) and decreased HRQOL (RR=4.16, 95%CI 2.26,7.66), but showed no increased risk for further revascularization procedure/death (RR=2.11, 95%CI 0.71,6.21). **Conclusion:** A

brief frailty index which includes cognitive, emotional, and social criteria is able to predict typical frailty outcomes although not therapeutic outcomes. Continued exploration of criteria from cognitive, and emotional, and social domains is warranted.

SESSION 2030 (PAPER)

MEDICATION USE ISSUES

PSYCHOTROPIC DRUG USAGE IN OLDER ADULTS LIVING AT HOME: RESULTS FROM THE HEALTH AND RETIREMENT STUDY (HRS)

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Although use of psychotropic drugs is common in older adults, prevalence of use of these agents has been investigated rarely for home-dwelling U.S. elderly. In this study we estimated the prevalence of psychotropic drug use among older adults (aged 50 and over) at home and examined demographic and clinical variances using a nationally representative sample (N = 4,624) from the first wave of the HRS 2005 Prescription Drug Study. The prevalence of older adults who were taking at least one psychotropic drug was 25.5%. The most frequently prescribed psychotropic drug was antidepressants (13%) followed by anti-convulsants (6.4%) and anxiolytics (5%). Cholinesterase inhibitors and sedatives were taken by 2.8% of older adults. Antipsychotics and antiparkinsonism drug were taken by 1.8% and 1.4% of people, respectively. Psychotropic drug use was most prevalent among people aged 50-64 (28.9%), followed by those over 85 (28.5%), 75-84 (26.2%), and 65-74 years old (21.7%). White people were more likely to use psychotropic drugs than other racial groups. People who were working for pay were less likely to use psychotropic drugs than those who were not employed. Perceived health was negatively related to use of psychotropic drugs; presence of memory disease, emotional disease, sleep disturbances, and troubles in pain were associated with the psychotropic drug use as well, controlling for other demographic factors. Our study results provide insights to healthcare providers and policymakers, which may be useful for screening and targeting older adults who are likely to receive psychotropic drug treatments.

RELATIONSHIP BETWEEN MEDICATION BELIEFS AND PSYCHOTHERAPEUTIC DRUG ADHERENCE AMONG OLDER ADULTS

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Background: Older adults are frequently prescribed psychotherapeutic drugs including opioids (pain relievers), central nervous system (CNS) depressants (tranquilizers and sedatives), and stimulants. These drugs can alter brain activity and are highly addictive. Research suggests that older adults are at high risk for the misuse of psychotherapeutic drugs. However, little is known about how older adults' medication beliefs impact their use of psychotherapeutic medications. **Purpose:** This ongoing study aims to examine the relationship between beliefs about medications and use of psychotherapeutic medications for older adults. **Method:** This study is a cross-sectional design. Participants are recruited from the Veterans Affairs Medical Center at Buffalo. Older adults are excluded if they are not able to communicate, have significant memory impairment (Mini Mental Status Examination score of less than 24), or do not have collateral informants to provide information. Measures include Mini Mental State Exam, the Beliefs about Medications Questionnaire, the self-report Medication Adherence Scale, and a demographic questionnaire. Descriptive statistics and Pearson's correlation will be utilized for analysis. **Results:** We expect that a total of 60 older adults will participate in this study. Preliminary findings indicate 25% of participants did not take their psychotherapeutic medications as prescribed. We hypothesize a moderate correlation between

medication beliefs and psychotherapeutic medication use. Conclusion: The findings will extend our understanding of the prevalence of psychotherapeutic misuse and the impact of medication beliefs on medication taking in older adults. Also, our findings will indicate a need to develop individualized monitoring programs for this ever-growing older population.

POTENTIAL UNDERUSE OF ANTIDEPRESSANTS IN OLDER VETERAN NURSING HOME PATIENTS

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The objective of this longitudinal study is to examine the prevalence and factors associated with antidepressant use by older long-stay Veterans Affairs Nursing Home Care Unit (NHCU) patients with a diagnosis of depression. This study included 3692 veterans aged 65 years or older admitted between January 1, 2004 and June 30, 2005 for 90 days or more to one of 133 VA NHCUs. Overall, 877 (23.7%) had a diagnosis of depression (determined by ICD-9 codes from hospitalization or physician visit in previous year, or severe depressive symptoms on NHCU admission). Of the 877 patients with depression, only 57.6% (n=505) received an antidepressant. Selective serotonin reuptake inhibitors were the most commonly used antidepressant class (72.1%) whereas tricyclic antidepressants or monoamine oxidase inhibitors were used infrequently (5.5%). Depressed patients with worse functional status (Adj. OR 1.03, 95%CI 1.01-1.05), or a history of hip fracture (Adj. OR 2.12, 95%CI 1.06-4.21) were more likely not to be treated with an antidepressant. Depressed patients with cancer (Adj. OR 0.65, 95%CI 0.45-0.96), more prescription orders (Adj. OR 0.98; 95% CI 0.98-0.99), antipsychotic use but not schizophrenia (Adj. OR 0.50; 95% CI 0.35-0.71), or acetylcholinesterase use (Adj. OR 0.61; 95% CI 0.41-0.91) were less likely not to have their depression treated by an antidepressant (i.e., more likely to be treated). Antidepressants are potentially underused in older veteran nursing home patients with depression, especially in those with relatively poor health status.

THE PREVALENCE OF PSYCHOTROPIC MEDICATION USE AMONG NURSING HOME RESIDENTS AND RELATIONSHIPS WITH FUNCTIONAL AND PSYCHOSOCIAL VARIABLES

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Psychotropic medications, such as antipsychotics, antidepressants, anxiolytics, and sedative/hypnotics, are commonly prescribed for older adults living in nursing homes and have been associated with negative functional outcomes such as falls, gait impairment, sedation, and cognitive decline. The purpose of this study was to describe the prevalence of psychotropic medication use among nursing home residents, and to test the relationship of psychotropic medication use on functional and psychosocial outcomes. This descriptive study is a secondary data analysis of baseline measures from the Restorative Care Study that included 419 residents from 12 nursing homes. Medication data was obtained from chart abstraction. The average age of the participants was 83.74 (SD=8.47), and the majority were female (80%), white (65%), and unmarried (90%). Results: There were 288 participants (69%) who were prescribed at least one psychotropic medication, with 81 participants (19%) taking antipsychotics, 248 (59%) taking antidepressants, 50 (12%) taking anxiolytics, and 37 (9%) taking sedative/hypnotics. After controlling for gender, age, and cognition, functional outcomes (specifically physical function and balance) were significantly lower in those residents taking psychotropic medications ($F=3.15$, $p=.01$) than those not taking psychotropic medications. Likewise, psychosocial outcomes (specifically self-efficacy and outcome expectations for function, and

quality of life) were significantly lower in those residents taking psychotropic medications ($F=1.92$, $p=.05$). The findings from this study provide additional support for the prevalence of psychotropic medication use among nursing home residents and suggest that residents taking psychotropic medications may be less likely to engage in functional activities, and experience decreased quality of life.

POTENTIALLY INAPPROPRIATE MEDICATION USE IN COMMUNITY-DWELLING DEMENTIA PATIENTS AND THEIR INFORMAL CAREGIVERS

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METHODS: Data were drawn from the Resources for Enhancing Alzheimer's Caregiver's Health (PI; R. Schulz), a sample of 1,222 caregivers from across the United States. This cross-sectional study analyzed the subset of dementia patients (n=1,173) and caregivers (n=569) aged 65 or older. PIM was defined using the 2003 Beers drugs-to-avoid criteria. The relationship between patterns of one dyad member's medication use on the other dyad member's risk of PIM was of particular interest. Separate multivariate logistic regression models were conducted for patients and caregivers. **RESULTS:** In dementia patients, 33% were taking at least 1 PIM, and 39% of caregivers were on a PIM. Nearly 57% of caregiver/patient dyads had at least one dyad member on a PIM. In the multivariate model of PIM use in dementia patients, the following characteristics were associated with an increased risk: female patient, younger caregiver age, less cognitive impairment, and caregiver polypharmacy (taking 5+ medications). In caregivers, the following characteristics were associated with an increased risk of caregiver PIM use: female caregiver, female patient, fewer years as a caregiver, number of caregiver comorbidities, patient PIM use, and patient polypharmacy. **CONCLUSION:** PIM use may be higher in dementia patients (33%) and their informal caregivers (39%) compared to the general older adult population (~20%). Further, patterns of medication use in one member of the caregiver/patient dyad may influence the other member's risk of PIM. These results suggest that interventions to increase appropriate medication use in dementia patients and/or caregivers should target both members of the dyad.

SESSION 2035 (SYMPOSIUM)

NEIGHBORHOOD CONDITIONS AND OLDER ADULTS: UNDERSTANDING HOW ENVIRONMENTS AFFECT LATE-LIFE FUNCTION

Chair: R.J. Thorpe, *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Discussant: D.K. Miller, *IU Center for Aging Research and Regenstrief Institute, Inc., Indianapolis, Indiana*

While studies have examined the relationship between neighborhood factors and health, little is known about the structural factors and mechanisms that link one's environment to late-life function. This symposium highlights epidemiological research focusing on how neighborhood conditions affect late-life function. Using data consisting of 6,000 older black and white adults, Mendes de Leon and colleagues examine the association of neighborhood cohesion and disorder with changes in disability over 9 years. Lemelin and colleagues examine how individual- and area-based socioeconomic characteristics and their interactions are related to physical functioning in later life in a sample of 5,362 adults. Using 10-year panel data of 3,956 black and white older adults, Kelley-Moore examines whether the pattern of variation in disability estimates affect "average" differences across race and SES within and between communities. The race and socioeconomic patterns in the variation of estimated disability trajectories vary by the type of community. James and colleagues use cross sectional data consisting of 1,140 adults, ages 50-70 to determine whether neighborhood psychosocial hazards (NPH)—visible characteristics of neighborhoods that heighten vigilance

or threat—are associated with lower social engagement. Findings indicate a step-wise reduction in social engagement across quartiles of NPH after adjustment for demographics, health characteristics, and SES. Adjusting for neighborhood SES strengthened the association between NPH and social engagement. Implications of these findings to late-life function will be discussed in the symposium.

NEIGHBORHOOD COHESION AND DISORDER IN RELATION TO CHANGE IN DISABILITY

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Despite emerging evidence regarding the association between neighborhood conditions and health, the exact role of neighborhood factors in health changes in older age remains poorly understood. In this presentation, we will study the prospective association of neighborhood cohesion and disorder with change in disability. Data come from a population-based, longitudinal study of about 6,000 older blacks and whites, with a high density of participants from a small urban area in Chicago. Using individual-level information, we will perform a spatial analysis to derive geographically-defined estimates of neighborhood-level social cohesion and disorder. These estimates will be combined with geocoded individual data, and merged with up to 9 yearly waves of self-reported disability measures. Using longitudinal models, we will test the hypothesis that neighborhood social cohesion is associated with smaller increases, and neighborhood disorder with greater increases in disability.

DO NEIGHBORHOOD PSYCHOSOCIAL HAZARDS CONSTRAIN OLDER ADULTS' SOCIAL ENGAGEMENT?

B.D. James¹, T. Glass¹, B.S. Schwartz², 1. *Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*, 2. *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Recommendations for older adults to stay socially engaged to promote healthy aging may ignore the social and environmental contexts that place certain populations at higher risk for social disengagement. We used baseline data from the Baltimore Memory Study (1,140 adults, ages 50-70, from 65 neighborhoods) to test the hypothesis that neighborhood psychosocial hazards (NPH)—visible characteristics of neighborhoods that give rise to a heightened state of vigilance or threat—were associated with lower social engagement (measured as a latent variable through factor analysis) using multilevel modeling. We found a step-wise reduction in social engagement across quartiles of our NPH scale after adjustment for demographics, health characteristics, and SES. This association was strengthened after adjusting for neighborhood socioeconomic deprivation. Violent crime rate alone was not the driving force behind the relationship. Finally, lessons on over-adjustment for ‘compositional’ variables such as race and SES emerged from this analysis and will be discussed.

DECONSTRUCTING DISPARITIES: PATTERNS OF WITHIN-COMMUNITY VARIATION IN DISABILITY TRAJECTORIES AMONG BLACK AND WHITE OLDER ADULTS

J. Kelley-Moore, *Sociology, Case Western Reserve University, Cleveland, Ohio*

The extent and pattern of variation in disability estimates affect whether “average” differences across races or levels of SES are significant within and between communities, yet this has not been systematically examined. Estimating multilevel models of 10-year panel data for Black and White older adults (N = 3,956), I demonstrate that the race and socioeconomic patterns in the variation around estimated disability trajectories vary by type of community. Variance in disability trajectories is smallest for non-incorporated rural areas and largest for sub-

urban areas. The significantly greater level of disability for Black older adults in urban areas is influenced by a cluster of highly-dependent elders. Disability trajectories over ten years in suburban areas are steepest for the middle SES category relative to low and high SES groups, controlling for baseline disability. Relying on the average estimated trajectory to determine between-community differences in disability obscures the social dynamics at work within communities.

LIFE COURSE INDIVIDUAL AND NEIGHBORHOOD SOCIOECONOMIC POSITIONS AND PHYSICAL FUNCTIONING AT AGE 53: A MULTILEVEL PROSPECTIVE ANALYSIS

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Cross-sectional studies have shown that older people in poorer neighbourhoods have worse physical capability than those in better neighbourhoods, with daily functioning affected by both individual and area level deprivation. Few studies have considered area effects acting across the life course. This study will examine how individual socioeconomic position [ISEP] and area-based socioeconomic characteristics [ASEP] are independently related to physical functioning at age 53. Using data from the MRC National Survey of Health and Development, we shall use cross-classified hierarchical models that allow for individual and area level variation at local government district across 1950, 1972, 1989, & 1999. ISEP is based on father's occupation in 1950 and the participant's own occupation for the following years. ASEP is the participant's residential address at each time point geocoded and linked to census data. Data was collected prospectively birth-age 53, when physical performance tests assessing strength, balance, and chair rising were administered.

SESSION 2040 (PAPER)

CURRENT STATUS OF MINORITY OLDER ADULTS

ETHNIC DISPARITIES IN LONGEVITY AND OLD-AGE PROFILES IN MULTICULTURAL HAWAII

K. Braun, C. Browne, N. Mokuau, *University of Hawai'i, Honolulu, Hawaii*

In the U.S., the residents of Hawai'i live the longest. In past estimates (1950-1990), ethnic disparities in life expectancy have been seen in the state, with the shortest estimates for Native Hawaiians. This paper presents life expectancy estimates from 2000; compares them to past estimates; and examines reasons for ethnic differences. Life tables for 2000 were calculated from death record and population data for the state's five major ethnic groups—Hawaiians (24%), Caucasians (24%), Japanese (18%), Filipinos (16%), Chinese (7%)—using methods comparable to past estimates. In 2000, life expectancy was again lowest for Native Hawaiians, highest for Chinese and Japanese residents, and intermediate for Filipino and Caucasians residents. Looking over time, life expectancy had increased significantly for all groups, but the relative and absolute disparities indices have changed very little, with about 10 years between the longest-living (Chinese and Japanese) and shortest-living (Native Hawaiians) groups. Disparities are explained, in part, by differences in each group's history in Hawai'i, socio-economic status, and lifestyle behaviors. These have resulted in very different life courses and very different profiles of the older adults in each ethnic group. Native Hawaiian kupuna (elders) have a higher prevalence of chronic disease and disability, as well as shorter lives than elders in other groups. These data are being used by Ha Kupuna—National Resource Center for Native

Hawaiian Elders at the University of Hawai'i to propose programs to address disparities over the life course so that more Native Hawaiian kupuna (elders) can enjoy a healthy old age.

LONELINESS AND MINORITY ELDERS LIVING IN THE UK: AN EXPLORATORY SURVEY

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INTRODUCTION: Research in the UK consistently reports that 8-10% of people aged 65+ report significant levels of loneliness. However, studies of loneliness have frequently excluded the 'ageing' migrant communities as these represent less than 5% of the population and thus national surveys rarely include sufficient numbers of older people from minority communities to establish overall levels of loneliness. **METHOD and RESULTS:** Data from a sample of 300 people aged 65+ from key minority communities suggest that this omission is a cause for concern. Overall 27% of the sample reported that they were often lonely and 11% that they were always lonely. This masks some striking variations between groups with 4% of Indian elders reporting that they are often/always lonely compared with 50% of the Pakistani group; 40% of the Bangladeshi group; 13% of Caribbean elders; 50% of African elders; and 40% of Chinese elders. Compared with 10 years ago the percentage rating themselves as more lonely ranged from 10% (Indian elders and the general population) to 80% (African elders). Thinking of the situation a decade in the future 4% (Indian elders) to 62% (African elders) thought that they were likely to be more lonely. **DISCUSSION/CONCLUSION:** These data provide a novel insight into the experience of loneliness amongst older people drawn from a range of minority ethnic groups and suggest that there is a need for considerably more research in this area specifically, and more broadly examining social relationships and social networks of our ageing minority communities.

HIGH DEPRESSIVE SYMPTOMATOLOGY AMONG OLDER COMMUNITY-DWELLING MEXICAN AMERICANS: THE IMPACT OF IMMIGRATION

K. Gerst, K. Markides, *University of Texas Medical Branch, Galveston, Texas*

Objectives: This analysis explores nativity differences in depression among very old (75+) community-dwelling Mexican Americans. **Design:** Cross sectional analysis using the fifth wave (2004-1005) of the Hispanic Established Populations for Epidemiologic Studies of the Elderly (Hispanic-EPESE). **Participants:** The sample consisted of 1,618 non-institutionalized Mexican American men and women aged 75 and over. Depressive symptoms were measured by the Center for Epidemiological Studies Depression Scale (CES-D). Logistic regression was used to predict high depressive symptoms (CES-D score 16 or higher) and multinomial logistic regression was used to predict low, moderate and high depressive symptoms. **Results:** Results showed that Mexican American elders that were born in Mexico had higher odds of more depressive symptoms compared to otherwise similar Hispanics born in the United States. Age of arrival and other covariates did not modify that risk. **Conclusion:** The findings suggest that older immigrants are at higher risk of depression compared to persons born in the US, which has significant implications for research, policy and clinical practice.

EXPLORING THE NEEDS OF ARAB AMERICAN OLDER ADULTS

E.L. Essex¹, N.M. Adam¹, W. Moukahal¹, S. Tabahi², 1. *Governors State University, University Park, Illinois*, 2. *University of Chicago, Chicago, Illinois*

The term Arab American is used to designate an immigrant or descendant from any of 22 Arabic speaking countries. Recent estimates of the number of Arab Americans range from 1.2 million to almost 4 million. However there has been little research about Arab American older adults,

and the limited research that exists was conducted primarily in the Dearborn, Michigan vicinity. Illinois ranks as the state with the sixth largest Arab American population. Many of the older Arab Americans in Illinois are first generation immigrants. We describe a qualitative study on the needs of older Arab American immigrants in the southwest suburbs of Chicago, the area of Illinois with the highest density of Arab Americans. In order to explore the needs of these older adults, we conducted four focus groups with 6 to 10 participants each. These included two groups, one male and one female, of Arab American elders (age 60 or older) and two groups, one male and one female, of adult children and children-in-law of Arab American elders. A salient theme expressed by all participants was adjusting to the social isolation of a highly individualistic society as opposed to the communitarian society in their country of origin. Participants expressed a desire for more opportunities for older adults to socialize with others from their own culture. Other concerns included access to transportation and health care services. We discuss the implications of our exploratory study for service planning and delivery as well as for future research.

SESSION 2045 (SYMPOSIUM)

EVALUATION OF THE MEDICARE LOW VISION REHABILITATION DEMONSTRATION

Chair: *W. Leutz, Heller School, Brandeis University, Waltham, Massachusetts*

Discussant: *S. Green, Center for the Visually Impaired, Atlanta, Georgia*

More than 3.6 million Americans over age 40 have vision impairments, which may result from conditions such as macular degeneration, diabetic retinopathy, and glaucoma. Although Medicare covers medical treatment for these conditions, its coverage is limited for assessments, services, and devices to help beneficiaries function better with low vision, e.g., magnifiers and lights. The purpose of the Medicare Low Vision Rehabilitation (LVR) Demonstration, which began in 2006 and ends in 2011, is to see if there are advantages to Medicare and Medicare beneficiaries by expanding coverage for LVR to include services provided by certified LV therapists, LV rehabilitation teachers, and orientation and mobility specialists, in addition to occupational therapists, and by having these LVR professionals provide services in appropriate setting, such as in the home. This symposium, based on research findings to date from the Demonstration evaluators, has three presentations followed by a discussant from one of the provider agencies. (1) Provider Case Studies of five large, non-profit organizations for the blind have participated the Demonstration, and four independent providers who have not. (2) Beneficiary Case Studies of nine beneficiaries, five of whom participated in the Demonstration. (3) Cost and Utilization of LVR Services, based on preliminary analyses of the Demonstration's Medicare claims data.

UTILIZATION PATTERNS FOR LOW VISION REHABILITATION: IMPACT OF THE DEMONSTRATION

C.E. Bishop, G. Ritter, *Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts*

Utilization of Medicare low-vision rehabilitation (LVR) services, under the Demonstration or under standard Medicare, is very rare, and it is difficult to identify beneficiaries with low vision using diagnostic codes. Despite these challenges, we used claims to develop estimates of whether the Demonstration (1) expanded access to Medicare-paid LVR services in Demonstration states and areas; (2) shifted the personnel providing Medicare LVR services or the location of service (office vs. home); or (3) for beneficiaries using Demonstration services, changed the utilization of other Medicare services compared to the year prior to LVR service use. These findings provide a backdrop for design of future innovations in LVR services.

PROVIDER CASE STUDIES

W. Leutz, *Heller School, Brandeis University, Waltham, Massachusetts*

The implementation evaluation of the Medicare Low Vision Rehabilitation (LVR) Demonstration included in-depth case studies of five large organizations for the blind that participated in the Demonstration and interviews with four independent providers who did not. Compared to the independents, the large organizations had advantages that allowed them to participate in the Demonstration, including organizational missions to expand services to Medicare beneficiaries, having the newly covered LVR specialists on staff, and resources to subsidize start-up costs and operational losses. Some of the large organizations had to make significant changes to financial and clinical systems to become Medicare providers. Others delivered only part of the newly covered services due to regulatory or professional barriers, or to financial incentives to deliver LVR services through occupational therapists. All respondents recommended increasing reimbursement rates for LVR specialists and adding coverage of LVR devices.

BENEFICIARY CASE STUDIES

W. Leutz, D. Gurewich, M.D. Gaiser, C.E. Bishop, *The Heller School for Social Policy & Management, Brandeis University, Waltham, Massachusetts*

The study collected information from nine beneficiaries who received Demonstration low vision rehabilitation (LVR) services. LVR helps patients function within their vision limitations. Some respondents successfully addressed their primary goal (e.g., reading) with LVR. However, LVR offered others only partial assistance (e.g., ability to read newspaper headlines, but not articles), or very little relief. Service effectiveness was affected by three barriers to using LVR: limited knowledge of LVR among medical providers, which was reflected in low referral rates; the need for beneficiaries to travel to service locations, which was addressed by family members; and the cost of devices, which was addressed by the providers' charitable funds. Three areas are presented for discussion regarding access and LVR services: education of medical providers about LVR, coverage of LVR exams and LVR professionals, and coverage for LVR devices. (Note that none of these three areas was within the scope of the Demonstration design).

SESSION 2050 (SYMPOSIUM)

MATURE WORKER POLICY INITIATIVES IN MASSACHUSETTS: THE VISION, THE REALITY

Chair: *E.A. Bruce, Gerontology, University of Massachusetts Boston, Boston, Massachusetts*

The proposed symposium will present lessons learned from Massachusetts policy initiatives designed to promote the employment of mature adults. These initiatives were developed in response to a growing body of labor market, demographic, and gerontological research suggesting the aging workforce and retirement of the Boomer cohort will have a negative impact on the Commonwealth's economic growth and productivity. By the year 2020, 25% of the Massachusetts workforce will be over age 60. The oldest of the Bay State's 1.8 million Boomers are now on the brink of retirement, raising concerns about potential labor shortages, skills gaps, and leadership vacuums in key industries such as health care, education, and government. The Massachusetts 50+ Task Force and subsequent Partnership on the Civic Engagement and Employment of Older Adults were designed to raise awareness of the macro-economic benefits of retaining older workers, and to promote a statewide policy agenda supporting older workers. The objective of the session is to describe the challenges of moving from research to policy development. Symposium presenters will discuss the vision behind these policy initiatives, highlight the successes and lessons learned, and address the practical realities of managing these projects. The program will include the following components: Massachusetts Demographic Pro-

file and Vision, Obtaining Political Buy-in and Navigating Stakeholder Agendas, Project Management and Lessons Learned, and The Policy Agenda.

MASSACHUSETTS DEMOGRAPHIC PROFILE & VISION

D. Banda, *AARP Massachusetts State Office, Boston, Massachusetts*

Approximately 25% of the Massachusetts population is over age 55, with the median age of individuals in the workforce at 42.0 years. As the pool of younger workers is shrinking in Massachusetts and nationwide, the pool of 50+ workers is growing. Given current economic conditions, the relative absence of defined benefit pensions and retiree health coverage, many older workers are planning to remain in the labor force beyond the traditional retirement age. The Massachusetts older worker policy initiatives described in this presentation were developed in response to these demographic and economic trends. The vision for these projects stems from an assumption that the economic and social well-being of Massachusetts may depend on how well we manage to retain and retrain – instead of retire – the increasing number of mature workers in Massachusetts.

OBTAINING POLITICAL BUY-IN AND NAVIGATING STAKEHOLDER AGENDAS

R. Palombo, *Executive Office of Elder Affairs, Boston, Massachusetts*

The Massachusetts Secretary of Elder Affairs joined with UMass Boston's Dean of the McCormack Graduate School of Policy Studies to develop a concerted effort to support and expand the workforce participation of older adults to improve the competitiveness of the Massachusetts economy. That initiative was expanded to include volunteerism when the state was selected to participate in the National Governors Association's Policy Academy on Civic Engagement of Older Adults. The initiative has required coordination across a number of government units including Executive Office of Labor and Workforce Development, Executive Office of Elder Affairs, Massachusetts Rehabilitation Commission, and the State Human Resource Division, as well as non-governmental entities such as universities and non-profit agencies. Staffing, financing, and locus of control were negotiated in an environment of declining revenue and a tight employment market. The strategies to deal with these challenges will be discussed as well as specific progress with the initiative.

PROJECT MANAGEMENT AND LESSONS LEARNED

A. Tull, *Research & Development, Massachusetts Rehabilitation Commission, Boston, Massachusetts*

This presentation will address the challenges of managing a policy initiative, with emphasis on the successes of the Massachusetts projects. Challenges to implementation included resource limitations, managing multiple stakeholder agendas, crafting the public relations message, getting the appropriate people to the table, and promoting this agenda in an environment of economic crisis. Successes included the ability to bring together diverse stakeholder groups, particularly government agencies that were not accustomed to working together, to address mature worker issues in a collaborative effort, and raising public awareness of an issue that is common in the literature, but not as visible in the policy arena. This presentation will address the importance of building a project management plan that is achievable and sustainable. Project management resources will be shared.

THE POLICY AGENDA

E.A. Bruce, *Gerontology Institute, University of Massachusetts Boston, Boston, Massachusetts*

The Massachusetts 50+ Task Force broke into 9 work groups; 2 focused on increasing volunteerism, 3 focused on employment of mature workers, 2 groups addressing the barriers of transportation and the digital divide, a policy work group and a public awareness group. The Policy Work Group gathered policy options that could increase employ-

ment/volunteerism among people 50+ from the literature and coalition members. A review of pending state legislation was completed. From this list, the group examined only state initiatives as the group's influence over federal legislation was deemed minor. The policy options fell into several categories; incentives, mandates, sanctions, and education. Criteria for assessing the options included cost, # of people affected, advocates and detractors for the policy, administrative complexity, and possibility of passage. The policy options that have been considered will be discussed as well as the process and criteria by which the options were chosen.

SESSION 2055 (PAPER)

NURSING HOME REGULATIONS

EXPLORING SPATIAL DETERMINANTS OF NURSING HOME DEFICIENCY CITATION ISSUANCE

M.W. Carter¹, J.A. Halverson², 1. *Center on Aging, West Virginia University, Morgantown, West Virginia*, 2. *West Virginia University, Morgantown, West Virginia*

All nursing homes receiving Medicare or Medicaid dollars must undergo an annual inspection to ensure quality of resident care. Previous research has revealed both intra- and inter-state variation in deficiency citation issuance, which may suggest systemic determinants of deficiency receipt. However, empirical investigations are lacking. In response, this study used data from the Online Survey Certification and Records System to examine the extent to which patterns of deficiency citation issuance are spatially correlated over surveyor regions. Survey regions were identified using a number of strategies, including telephone and email correspondence, leading to the identification of survey boundaries in 25 states. Multivariate Spatial Lag Models were used to examine the extent to which region of location explained spatial variation in deficiency citation issuance across nursing homes. Model results were compared with estimates obtained from random effects models. Results from the spatial lag models suggested that neighboring facilities' receipt of deficiency citations are an important determinant of deficiency citation issuance. For example, the Moran's I (0.098, $p < .000$) was significant, confirming the presence of spatial dependence, while the spatial lag parameter (0.306, $p < .000$) indicated that the values clustered geographically. Random effects models failed to account for spatial variation, as the level-1 variance components remained nearly identical to the unconditional models. Findings provide new insight into the underlying causes of variations in outcomes across facilities that cannot be explained by differences in facility operating characteristics, resident population characteristics, or area market attributes.

PERSISTENT DEFICIENCY CITATIONS OF PRESSURE ULCERS IN NURSING HOMES

N.J. Zhang, S. Paek, T. Wan, *Department of Health Management and Informatics, University of Central Florida, Orlando, Florida*

Background: Despite being classified as only a localized soft-tissue wound, pressure ulcers have many serious clinical complications and a negative social impact for patients. Identifying risk factors related to persistent deficiencies of treating pressure ulcers in nursing homes and providing evidence-based knowledge in preventing resident deficiencies from resurfacing are key steps to reducing occurrences of pressure ulcers. However, few studies have examined the development of persistent deficiencies of pressure ulcers in nursing homes. Objectives: The principal aim of this study is to examine organizational, management, aggregate residential and market factors associated with persistent deficiency citations for treating pressure ulcers in nursing homes. Research design: We conducted a pooled cross-sectional analysis of 11 years data from 1997 to 2007 of all certified U.S. nursing homes. Both Online Survey Certification and Reporting Data and Area Resource File were used. A binary logistic regression model was utilized to test the proposed

hypotheses. Results: In addition to clinical factors, organizational, management and market risk factors are associated with the development of persistent deficiencies of treatment of pressure ulcers. Comprehensive care planning, resident assessment, total nurse staffing and market demand are all positively associated with fewer persistent deficiencies of treatment of pressure ulcers. Conclusions: Our study shows that a multidisciplinary approach integrating clinical, organizational, management and market strategies provides better interventions for persistent deficiencies of pressure ulcers. The effectiveness of multidisciplinary intervention on other deficiency citations should be examined in future studies.

SESSION 2060 (PAPER)

OLDER AMERICANS ACT (OAA): CLIENTS AND SERVICES

UNMET NEEDS FOR THE OLDER AMERICANS ACT NUTRITION PROGRAM IN GEORGIA

J. Lee¹, A. Brown², M. Johnson¹, R. Bengt¹, S. Sinnett¹, 1. *Foods and Nutrition, University of Georgia, Athens, Georgia*, 2. *Georgia Department of Human Resources Division of Aging Services, Atlanta, Georgia*

The Older Americans Act Nutrition Program (OAANP) is the longest and largest program under the Older Americans Act (OAA) meant to improve independence and overall well-being of low-income minority, rural older adults. With population aging and the current economic crisis, this program is challenged to meet the unprecedented increased needs for its services. We examined the capacity of the Georgia OAANP and characteristics of the waitlisted people using data from the Georgia OAANP client database systems and the ongoing Georgia Performance Outcomes Measures Project. Based on the client database systems, we identified a total of 4731 older Georgians who requested OAANP services during July through mid November, 2008. Only 40% of them received the program, and the remaining 60% were on the waiting list. Around 33% of those identified completed the self-administered mail surveys ($n=1594$, mean age: 74.5 ± 9.7 , 68.5% female, 26.4% black). Waitlisted people who participated in the survey were more likely to be younger, black, less educated, under poverty level, and requesting home delivered (vs. congregate) meals than those enrolled in the meals programs. They also reported higher levels of poorer self-reported health status, food insecurity and nutritional risk. The Georgia OAANP does not completely meet the needs of older Georgians, especially those targeted by the OAA. Given the critical role of optimal nutrition in healthy aging, more attention should be given to expand and enhance the delivery of the Georgia OAANP to meet the need and demand of nutritionally vulnerable older Georgians.

ETHNIC-RACIAL DIVERSITY AND SOCIAL SUPPORT OF SENIOR CENTER PARTICIPANTS: RESULTS FROM THE HEALTH INDICATORS PROJECT OF NEW YORK CITY

N. Giunta^{1,2}, C. Morano^{1,2}, N. Parikh², D. Friedman², M. Caron², D. Das², M. Ruiz², M.C. Fahs^{2,3}, 1. *Hunter College School of Social Work, New York, New York*, 2. *Brookdale Center for Healthy Aging & Longevity, Hunter College, City University of New York, New York, New York*, 3. *Hunter College Program in Urban Public Health, New York, New York*

As baby boomers reach retirement age, it is essential that evidence-based programs and services are accessible in communities to promote healthy aging and prevent or delay the onset of chronic conditions. In the first year of a three-year study to assess the effectiveness of New York City's aging services network, a survey of senior center participants was conducted with a random, representative sample of 1870 older adults from 56 senior centers citywide. This paper presents an examination of neighborhood perceptions, social support, and health status among senior center participants. Preliminary results using bivariate

analyses support existing evidence of the positive relationship between social support and self-reported health ($F = 3.63$, $p < .01$). However, social support among older adults who attend senior centers with more ethnically and racially diverse populations was found to be significantly lower than participants in more homogeneous centers ($t = -3.46$, $p < .01$). Multivariate analyses will be presented to better understand these findings and to help design effective policies and programs that support healthy aging among ethnically and racially diverse populations. This first of its kind representative sample of senior center participants provides a rigorous methodological approach to designing and implementing evidence-based interventions in community-based settings serving older adults.

COMMUNITY-BASED PREVENTIVE GERONTOLOGY AND PUBLIC HEALTH: POTENTIAL ECONOMIC BENEFITS OF EVIDENCE-BASED STRATEGIES TO REDUCE RACIAL/ETHNIC DISPARITIES IN HEALTH RISKS AMONG SENIORS ATTENDING SENIOR CENTERS

M.C. Fahs^{1,2}, N. Parikh³, D. Das³, D. Friedman³, M. Caron³, M. Ruiz³, N. Giunta¹, C. Morano¹, 1. Brookdale Center for Healthy Aging and Longevity, Hunter College, New York, New York, 2. Graduate Center, City University of New York, New York, New York, 3. Brookdale Center for Healthy Aging and Longevity of Hunter College, New York, New York

Innovative community-based models are urgently needed to target effective prevention among urban older adults. Recently, the Urban Institute projected significant savings within 5 years from investments in strategic low-cost, community-based prevention efforts. Yet a paucity of studies differentiates correlates of health risks by race/ethnicity and neighborhood among community-dwelling older adults. We use a public health ecological approach to estimate potential economic benefits of risk reduction in 3 important areas affecting health: nutrition, physical activity, and tobacco use among NYC seniors attending senior centers, a potentially vital structural component of urban aging policy. We conducted a survey of 1,870 randomly selected adults aged 60 years attending a representative sample of 56 senior centers in NYC in 2008. In-person interviews were conducted in six languages using standardized individual and neighborhood-level health risk instruments. Random effects models estimate the impact of individual and neighborhood-level characteristics on health risk behaviors. Economic projections associated reduced health risk behaviors are derived. The sample is composed of 44% White non-Hispanics, 21% Latino/Hispanics, 21% African Americans, 14% Asian/Pacific Islanders. Strikingly, senior center participants are representative of the US population of community-based older adults, based on nonsignificant differences in physical and mental health scores. Yet large statistically significant ($p < .01$) differences in health risks by race/ethnicity and neighborhood were identified, with large potential for economic benefit associated with risk reduction. Neighborhood-based senior centers have the potential to contribute to healthy urban aging. New policy initiatives are discussed within the economic framework of community-based public health prevention.

TITLE V OF THE OLDER AMERICANS ACT, THE SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM: PARTICIPANT DEMOGRAPHICS AND SERVICE TO RACIALLY/ETHNICALLY DIVERSE POPULATIONS

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The number of older adults in our nation's workforce has been steadily increasing since the late 1980s. The Senior Community Service Employment Program (SCSEP) —authorized by Congress in Title V of the Older Americans Act of 1965 and administered by the USDOL—is a work-training program for low-income job seekers, age 55+, and is

part of a larger public policy effort to help older Americans maintain maximum independence. Emphasis is placed on assisting individuals with the greatest social and economic need, particularly low-income minority individuals and those living in rural areas. An analysis of participation levels of minority individuals and an examination of their duration on subsidized employment and eventual employment outcomes (job placement) was conducted. Overall, findings indicate that SCSEP serves a substantially higher proportion of minority groups overall than their incidence in the population, and specifically serves slightly higher proportions of Blacks, American Indians and Pacific Islanders. Major findings include that Pacific Islanders have the longest duration in this subsidized employment program and in terms of employment outcomes, Hispanics are employed at a higher rate than non-Hispanics. This presentation will discuss these findings and others, along with national level programmatic implications which include: (a) a need for more training & technical assistance on how to recruit, train and retain racially/ethnically diverse seniors and (b) more targeted outreach by grantees to the minority populations that are being underserved.

SESSION 2065 (POSTER)

RESEARCH METHODS: APPROACHES AND PARTNERSHIPS

CONTENT ANALYSIS APPLIED TO PUBLIC USE AGING SURVEY INSTRUMENTS TO ASSESS ACTIVITY MEASURES

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This poster presents the application of a Content Analysis method and describes how it was applied to a collection of 8 survey instruments from public use data sets to thematically categorize measurement domains and variables related to older adults and activity. Public use data sets include: American Community Survey, National Health Interview Survey, Behavioral Risk Factor Surveillance System, Panel Study on Income Dynamics, Midlife in the United States, Baltimore Longitudinal Study of Aging, Longitudinal Study of Aging, Health and Retirement Study. Methodological description of the Content Analysis includes the process of public use data set selection, data collection across public use data sets, determination of decision rules for data inclusion/exclusion, data analysis, and assessment and articulation of findings. Means of establishing reliability and ensuring scientific rigor are discussed. Findings comment on the use of Content Analysis as a preliminary step in comparing the usefulness of public use data sets to answer specific empirical research questions about activity patterns and their associated factors and health outcomes.

METHODOLOGICAL CHALLENGES OF CONDUCTING RESEARCH WITH A COMMUNITY-ENGAGED ARTS PROGRAM

E. Moody, A. Phinney, School of Nursing, The University of British Columbia, Vancouver, British Columbia, Canada

Arts programs have been shown to support healthy aging and may be particularly important for older adults living in the community who are at risk for social isolation. Research on arts programs is becoming increasingly important to provide evidence on how to best promote healthy aging for older adults, however, there are often challenges to conducting research with arts programs, especially those conducted in collaboration with community groups. In this paper, I will describe the methodology and findings of an ethnographic study with a Community-Engaged Arts program. I will also point to some of the methodological challenges of conducting the research and the possibility that these challenges are indicators of the success of the program. The research, com-

pleted as part of a masters thesis, included several hours of participant observation and interviews with participants and staff involved with the Arts, Health and Seniors Program, a Community-Engaged Arts project offered in Vancouver, Canada. In addition to providing arts programming, the Arts, Health and Seniors Program was aimed to support independence and community inclusion for the older adult participants. The findings indicate that there was a strong sense of community within the group and that the members found new ways to engage with others in their neighborhood through the group work. I will discuss the significance of the methodological challenges of conducting research in such a setting and explore the possibility that they may indicate strengths of the program.

A STATEWIDE SATISFACTION SURVEY FOR RESIDENTIAL CARE FACILITIES: INSTRUMENT REFINEMENT

J. Straker^{1,2}, J.S. Brown^{2,1}, 1. *Scripps Gerontology Center, Oxford, Ohio*, 2. *Dept. of Sociology and Gerontology, Oxford, Ohio*

The Ohio Residential Care Facility (RCF) Resident Satisfaction Survey was developed by the Scripps Gerontology Center at Miami University and the Margaret Blenkner Research Institute at Benjamin Rose in 2006. At that time, a limited pretest with data from 102 residents in 9 nursing homes was conducted. Because of the limited number of written survey responses received in the pretest it was recommended that additional psychometric work be conducted after statewide data collection. The RCF satisfaction survey interviews were conducted in fall 2007. This presentation details the psychometric analyses conducted on the statewide data. Over 9000 interviews were conducted with residents in 529 Ohio residential care facilities. The data from those interviews provides the basis for this psychometric work. For the items in these analyses, the number of respondents ranged from about 6,000 to over 9,000. Results were used in developing the list of items to be included in each domain for domain score calculation reported on Ohio's long-term care consumer guide website at www.ltcoho.org. Based on statewide data and behavioral coding during interview observation we recommend changes to domains, elimination of items, and further refinements of item wording. We expect that these changes and the presentation of our improved survey instrument will result in a better interview process and more reliable results when the RCF satisfaction survey is administered again in 2009.

PAPER OR INTERNET?: EXAMINING DIFFERENCES IN RESPONSES TO WEB-BASED AND MAILED PROGRAM EVALUATION SURVEYS

J.C. Greenfield¹, N. Morrow-Howell¹, J. Branham², 1. *Washington University in St. Louis, St. Louis, Missouri*, 2. *The OASIS Institute, St. Louis, Missouri*

A program evaluation survey was conducted with participants of a national education/service organization serving adults age 50 and older. The study's purpose was to understand differences in results from Web-based versus paper surveys. A sample of 300 respondents was chosen from among organization participants with email addresses, with 150 drawn from each of two program locations; these respondents received an email invitation to complete a Web-based survey. Another sample of 300 participants was chosen from program participants at the two locations regardless of their email status; these respondents received a paper survey mailed to their home address. Both groups received two reminders in the month following the initial invitation to participate. When comparing the Web-based and paper survey groups, statistically significant differences emerged. Among those who had not been active with the organization recently, those who responded by Internet tended to choose travelling or volunteering elsewhere as the top reasons, while mailed survey respondents endorsed reasons related to health problems or transportation challenges. Internet respondents reported greater ease in completing the survey and less time required to complete the survey, and

Internet surveys generated fewer missing data. Paper surveys, however, had higher response rates. Despite the potential benefits of using Web-based survey instruments, these results suggest that respondents to paper and Web-based surveys may be meaningfully different. Although Web-based surveys have potential to be efficient and effective for program evaluations, they may not have broad enough reach for those wishing to gather data from diverse samples of older adults.

SENIORS COUNT!: A COMMUNITY BASED PARTICIPATORY RESEARCH APPROACH TO COMPILING AND DISSEMINATING DATA ON AGING

T.B. Jankowski¹, J. Booza², C. Leach¹, 1. *Institute of Gerontology, Wayne State University, Detroit, Michigan*, 2. *Wayne State University School of Medicine, Detroit, Michigan*

A dearth of accessible data on the growing aging population in Southeast Michigan prompted the development of the Seniors Count! project, a collaboration between the Institute of Gerontology at Wayne State University in Detroit and Adult Well Being Services, a local non-profit community agency that promotes the health and independence of older adults through advocacy and service. The Seniors Count! project is funded by the Kresge Foundation, the Community Foundation of Southeast Michigan, and the American House Foundation to plan, design, and implement an ongoing systematic collection, analysis and interpretation of demographic and social data on older adults in the region. Inspired by the successful Kids Count initiative, Seniors Count! seeks to assess the well being of older adults by identifying, gathering, and analyzing core indicators of basic individual and social characteristics related to health, health care, income, education, transportation, housing, the workforce, social services, public safety, civic engagement, and volunteer opportunities. We employ strategies from community based participatory research (CBPR) to encourage and facilitate participation from stakeholders, such as service providers, non-profit organizations, Area Agencies on Aging, government officials, policymakers, and advocates, in our Community Advisory Board (CAB). The CAB helps to identify data sources, but more importantly, provides advice and guidance to our researchers about the utility of various data and the ways in which they can be reported. Our poster discusses how we employed CBPR methods to form a community partnership to meet the data needs of the aging network as it plans for population aging.

EPISODES OF CARE: AN IMPORTANT FRAMEWORK FOR INVESTIGATING NURSING HOME OUTCOMES

K. Thomas, Z.D. Gassoumis, K. Wilber, *Davis School of Gerontology, University of Southern California, Los Angeles, California*

Nursing home usage patterns and discharge outcomes continue to be important research and policy topics. This poster describes the rationale for using aggregated episodes of care instead of unaggregated stay data; provides a detailed description of how to create episodes of care from MDS records; and compares usage patterns and discharge outcomes using episode versus stay data. The need to create episodes is driven by two issues inherent in nursing home outcomes research: sampling biases and transitions between care settings, specifically between hospitals and nursing homes. Because of the population mix and resident transitions, traditional length of stay calculations tend to overestimate acute discharges and underestimate the number of long-stay residents. Methodological differences in how these issues are handled produce significantly different results, which have implications for research and policy. For this analysis, an episode is defined as an aggregated nursing home stay without an intervening discharge period of more than thirty days. An episode ends when the resident remains outside the nursing home for more than thirty days or when he/she dies. In this study, the stay data show 47% of residents being discharged within thirty days, compared to 39% when using episode data. Looking at discharge outcomes, stay data show 17% of residents discharging to acute within fourteen days, compared to 10% using episode data. Inconsis-

tent sampling techniques and episode definitions make it difficult for researchers to compare results across studies. Furthermore, accurate measurement of nursing home use is important for designing and pricing public and private long-term-care insurance.

CLIENT AND CAREGIVER PERCEPTIONS OF ADULT DAY SERVICES: A PROGRAM EVALUATION

D.M. O'Donnell, *Hurley Elder Care Law, Atlanta, Georgia*

The MJCCA Weinstein Center for Adult Day Services provides social activities and medical services to older adults, including individuals with memory loss. Center administrators requested a program evaluation to explore attraction and retention of clients, beneficial effects of Center activities, and the current case management program. Regular members of the Center's Traditional Group and family caregivers of Memory Loss program attendees participated in open-ended interviews in focus groups. Content analysis revealed that clients consider Center activities, staff, and social environment superior to the few other day care alternatives. The activities benefit clients primarily physically and emotionally. Potential areas of improvement include enhanced communication with caregivers and more engaging, mentally-stimulating activities personally significant to participants. These findings reveal that person-centered care is appropriate in the adult day service setting and can guide the Center in program modifications.

SESSION 2070 (PAPER)

TRANSITIONS BETWEEN CARE SETTINGS

HEALTH CARE TRANSITION IN SMALL ADULT CARE HOMES

K. Bailey, *Social Work, Arizona State University, Phoenix, Arizona*

This paper presents the results of a qualitative exploratory study of small adult care home owners and their experience with health care transitions. Health care transitions are an issue of national concern. The elderly are particularly vulnerable to frequent health care transitions and represent the largest population at risk for rehospitalization, emergency room use, and medication errors resulting from poor care transitions. Small adult care homes are an integral part of the care continuum, yet investigation into health care transition in this setting is scant. Research to date has been focused on medical settings to the exclusion of this provider group suggesting they may be marginalized within this health care continuum. Eight semi-structured interviews were conducted with small care home owners (bed capacity 10 and under) licensed in Maricopa County, AZ over a three month period. Grounded theory methodology was utilized to analyze care home owners experiences. Findings indicate no standardized process for coordination of care with this provider group. Instead, owners develop unique strategies, including development of their own forms, direct in-person contact, family bonding, and relationship building with medical providers to mediate the exchange of health care information. Factors impacting owner's utilization of these strategies include length of time in the business, age of owner, and having a medical background. Findings of this study indicate a need for improved processes of communication and increased understanding of regulatory requirements between small care homes and medical providers.

THE IMPACT OF GROUP ADULT FOSTER CARE SERVICES ON NURSING FACILITY ADMISSION

W. Lin, L. Bruner-Canhoto, G. Aweh, M. Samnaliev, D. O'Connor, D.B. Centerbar, P. Swoboda, R. McManus, *Center for Health Policy and Research, University of Massachusetts Medical School, Shrewsbury, Massachusetts*

Growing awareness of the need to rebalance the national's long-term care system toward home and community-based services and continuing interests in cost containment have prompted states to pursue nurs-

ing facility (NF) alternatives. One alternative, Group Adult Foster Care (GAFC), provides personal care, nursing oversight, and case management in a community-based housing environment. This study examined whether GAFC use was associated with delayed long-term NF admission. Massachusetts Medicaid claims and Minimum Data Set - Home Care (MDS-HC) assessments for GAFC applicants from FY04 to 06 were merged for analysis. We identified a group of 1,276 GAFC users and a comparison group who applied for but did not use GAFC (n=178). To address the potential selection-bias surrounding the non-random assignment of GAFC users, we used the propensity score method to estimate the probability of GAFC use. We included this estimated probability as a control variable in the subsequent survival analysis modeling time to NF admission. The unadjusted percentage of non-GAFC users staying in the community rapidly decreased in the first 9 months after MDS-HC assessment, compared to a moderate decrease in GAFC users. Results from the survival analysis show that the NF admission rate in GAFC users at any point in time was less than one-third of the rate for non-GAFC users (hazard ratio=0.32 and 95% CI (0.20, 0.51)). Our findings show that GAFC can divert users from long-term NF admission. As states actively pursue NF alternatives, the GAFC model of combining housing and medical services is a plausible option.

MAKING CARE COORDINATION ESSENTIAL TO NATIONAL HEALTH CARE REFORM

P.J. Volland, J. Melly, *SWLI, New York Academy of Medicine, New York, New York*

Numerous studies have documented that the relatively small percent of Medicare beneficiaries with multiple chronic conditions account for the vast majority of Medicare spending; eventually many of these individuals are institutionalized. Once this occurs the costs associated with their care rises from \$20,000 to \$77,000 per year. Care coordination is a vital tool in reducing long-term health care costs and improving quality of life for adults with multiple chronic conditions by taking a client-centered, assessment-based interdisciplinary approach to integrating health and human services care. In 2008 the National Coalition on Care Coordination (N3C) was convened under the leadership of the New York Academy of Medicine (NYAM) to advocate for the inclusion of adopting care coordination policies as the foundation of care. NYAM is also currently partnering with the New York State Department of Health to develop a blueprint for adoption of comprehensive care coordination guidelines, and a plan that improves the quality of long-term care for older adults by implementing a statewide care coordination program that is person-centered while adhering to a single format. This process has included community-based participatory research to develop consensus around care coordination principles and qualifications. Focus groups have been conducted with caregivers, care coordinators and agency staff. This presentation will focus on the development of N3C and the Blueprint for Care Coordination for NYS, and the efforts to ensure that care coordination policies are included in upcoming health care reform and health care policies in NYS.

UTILIZING THE CTM3 TO EVALUATE A CHANGE IN HOSPITAL DISCHARGE PLANNING PRACTICE

M.A. Hemann², D.E. Holland¹, *1. Nursing Research, Mayo Clinic, Rochester, Minnesota, 2. Mayo Clinic, Rochester, Minnesota*

While the National Quality Forum (NQF) endorsed the 3 item Care Transitions Measure (CTM3) as a standardized measure of patients' perceptions of care coordination, little evidence was found in the literature regarding its use in practice. The CTM3 was mailed one week after discharge to 416 adult medical-surgical patients hospitalized in a large Midwestern academic medical center prior to a discharge planning the practice change and to 387 patients from the same two units after the change. This practice change targeted higher risk patients for a standardized discharge planning intervention. Following NQF specifications, the CTM3 was mailed to all discharged patients (both targeted high risk patients

directly effected by the discharge planning intervention and lower risk patients not directly effected by the practice change). The response rates were 52.8% before (220/416) and 39.5% (153/387) after the practice change. There were no significant differences in demographic characteristics between the before and after groups, although a greater proportion of the respondents after the practice change were hospitalized for surgical reasons than the group prior to the change. A large ceiling effect (highest possible score) occurred in the scores from both groups (48.6% in the group prior to the practice change, 37.3% afterwards). Scores of targeted higher risk patients improved (before = 65.1(±30.3), after = 75.0 (±25.8)). The CTM3 appears to have utility in assessing patients' perceptions of care coordination in targeted higher risk patients. The utility of CTM3 responses from a general sample of hospitalized patients remains unclear.

SESSION 2075 (SYMPOSIUM)

WWW.LTCFOCUS.ORG: A NEW LONG-TERM CARE DATA RESOURCE FOR RESEARCHERS, POLICY MAKERS AND THE PUBLIC

Chair: *O. Intrator, Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island, VA HSR&D, Providence, Rhode Island*

Discussant: *J.G. Haaga, National Institute on Aging, Bethesda, Maryland*

More than 1.4 million Americans live in nursing homes today. By 2020, an estimated 12 million will need long-term care, whether in a nursing home, assisted living facility, chronic care hospital or at home. Brown University researchers have created a database aimed at providing information to improve the nation's long-term care system – and the lives of the elderly who rely on that system. The “www.LTCFoCUS.org” website hosts data regarding the health and functional status of nursing home residents, characteristics of facilities, state policies relevant to long term care services and financing, and new survey data regarding delivery of care in nursing home settings. The data will allow researchers to trace a clear relationship between state policies and local market forces and the quality of long-term care. Researchers can use this website to examine care processes and resident outcomes within the context of their local markets and regulatory practices. Policymakers can use the information to shape state and local guidelines, policies, and regulations that promote high-quality, cost-effective, equitable care to older Americans. Together, it is anticipated that these audiences will have the data, tools and results to better understand the long term care system, and to achieve improvements in how care is organized, financed and delivered. This symposium will introduce the website, demonstrate its features by navigating through it, describe the underlying data sources, and demonstrate its utility by presenting a glimpse of regional variation in long-term care, raising the question: Is geography destiny in long-term care?

WWW.LTCFOCUS.ORG: DATA SOURCES AND DATA QUALITY

O. Intrator^{1,2}, V. Mor¹, M.A. Unruh¹, V. Nathilvar¹, Z. Feng¹, *1. Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island, 2. VA HSR&D REAP, Providence, Rhode Island*

The Minimum Data Set (MDS) resident assessments underlie many of the measures published on the LTCfocUS website. The MDS includes over 300 data items and is completed upon admission, discharge, significant change, and at least quarterly. The assessments enable a health care provider to assess key domains of physical and cognitive function, social support, and service use. Summary outcome scales measure cognitive and physical function, mood, pain, etc. This data, now used in research for almost 2 decades, is used for reimbursement by Medicare and 37 states. MDS-based quality measures for long stay and post-acute patients are published quarterly by CMS. This paper examines the completeness of the MDS assessment schedule and the corroboration of

MDS items and measures with diagnoses in Medicare claims. These results quantify the quality of the measures published on the LTCfocUS website and their geographic variation and changes over time.

WWW.LTCFOCUS.ORG: NURSING HOME PROVIDERS

Z. Feng, M. Fennell, O. Intrator, V. Mor, *Center for Gerontology & Health Care Research, Brown University, Providence, Rhode Island*

The framework used in the LTCfocUS.org to characterize nursing home residents is based on all residents identified in the nursing home on a particular day each year. Using these residents' Minimum Data Set (MDS) assessments, information is aggregated from those residents to the facility level. This enables users of LTCfocUS.org to profile all certified US nursing homes at an annual snapshot or track individual providers in a longitudinal manner. This presentation concentrates on the shifts over time in racial composition of nursing home residents; racial segregation and disparities in nursing home access and quality of care; trends in the case mix of nursing home residents; and changes in both the levels and skill mix of nursing home staffing (from Online Survey Certification and Reporting data). Geographic variability in selected provider characteristics will also be presented using geo-referenced data.

LTCFOCUS.ORG: NAVIGATING THE SITE

D. Tyler, V. Mor, Z. Feng, O. Intrator, *Center for Gerontology, Brown University, Providence, Rhode Island*

The LTCfocUS.org website provides users with research abstracts and publications and allows users to create their own tables and maps. This data-rich and graphically sophisticated website allows users to customize maps and tables to gather information by state, county, or individual facility, including information on facility characteristics, geo-coded facility locations, resident characteristics, local market characteristics, facility staffing, admissions, quality, and state long-term care policies. The goal of the website is to allow researchers to trace clear relationships between state policies and local market forces and the quality of long-term care. Policymakers will also be able to use the information to craft state and local guidelines that promote high-quality, cost-effective, equitable care to older Americans. This presentation will introduce the data available on the website and demonstrate its functionality and use, including the creation of custom maps and tables.

SESSION 2080 (SYMPOSIUM)

THE EVOLUTION OF SLOW AGING AND NEGLIGIBLE SENESCENCE

Chair: *C. Finch, University of Southern California, Los Angeles, California*

Relative to most other mammals, humans have very slow rates of aging. This symposium will summarize evidence and theory for the popular concept of negligible senescence.

AVOIDING AGING: NEW PERSPECTIVES ON OLD THEORIES

D. Promislow, J. Moorad, *Genetics, University of Georgia, Athens, Georgia*

Classic models for the evolution of senescence suggest that aging is an inevitable consequence of the way that selection acts, or fails to act, on old individuals. However, these models are based on numerous simplifying assumptions. We have taken a new look at these old models, relaxing many of these simplifying assumptions. New results suggest that under a variety of circumstances, the rates of decline in the force of selection may be much slower than previously thought.

THE EVOLUTIONARY ECOLOGY OF SLOW AGING AND NEGLIGIBLE SENESENCE

S. Austad, *University of Texas Health Science Center, San Antonio, Texas*

Only a handful of animal species have been reliably reported to live more than a century in nature — the current long-life record holder being the ocean quahog which can live more than 400 years. I will review what is known about the longevity of a number of these exceptionally long-lived species and discuss how the particular ecological niche they occupy and anatomical/physiological traits they possess may have led to the evolution of slow aging. Using the principles revealed by this analysis, I will also make predictions about other animals in which negligible senescence has not yet been described but should be with sufficient investigation.

DEMOGRAPHY OF AGING FOR PLANTS IN NATURAL ENVIRONMENTS

D. Roach, *Biology, University of Virginia, Charlottesville, Virginia*

Most of our information about variation in the rates of aging is based on humans and short-lived animal studies in the laboratory. When we look more broadly across species, there is evidence that some organisms may be able to escape senescence. For example, many plant species, with their modular body plans, indeterminate growth and long life spans, may challenge the theoretical expectation of the inevitability of senescence. This talk will discuss our current knowledge of senescence patterns across the plant kingdom and will use recent analysis from field experiments with *Plantago lanceolata* to demonstrate negligible senescence. Results will also be presented to show that age-by environment interactions are critical to our understanding of senescence across species in their natural environments.

EXPANDING EVOLUTIONARY THEORY OF AGEING

A. Baudisch, *Max Planck Institute for Demographic Research, Rostock, Germany*

Senescence is only one possible path of life for a species. Alternatively, adulthood could follow a simple path of maintenance or even of continued growth and enhancement. It is time to expand the evolutionary theory of ageing to embrace age-patterns of mortality, fertility and growth that include not only senescence but also sustenance and improvement. Classical theory argues that senescence is inevitable, because the force of selection declines with age. Challenging this view, it is argued that a declining force of selection does not preclude the evolution of non-senescent life history strategies.

SESSION 2085 (SYMPOSIUM)

ASSOCIATIONS BETWEEN DAILY AND CHRONIC STRESSORS, FAMILY RELATIONSHIPS, AND WELL-BEING

Chair: K.E. Cichy, *Human Development and Family Studies, Kent State University, Kent, Ohio*

Discussant: M. Franks, *Purdue University, West Lafayette, Indiana*

This symposium features research examining associations between family relationships, stressful experiences, and health. Families face chronic issues, such as the stressors associated with family caregiving or managing a chronic health condition, as well as the daily hassles of family life, such as an argument with a spouse or concern over a family member's problem. Both chronic stressors and daily hassles may compromise health by taxing individuals' physical, emotional, and cognitive resources. This symposium will highlight the ways family relationships contribute to how individuals respond to both chronic and daily stressful experiences. First, Berg, Wiebe, and Butner examine emotional transmission between spouses in couples experiencing stressful events surrounding prostate cancer. Martire, Stephens, Brach, Keefe, and Schulz examine same-day and next-day associations between spousal influence and patients' daily functioning among older knee osteoarthritis patients and their spouses. In contrast, Cichy, Stawski, Mroczek, Spiro, and

Almeida examine older spouses' emotional reactivity to their own as well as their spouses' daily stressful experiences. Finally, Stawski, Cichy, Sliwinski, and Mogle examine how perceived social support from family and friends buffers older adults' emotional and cognitive reactions to daily stressors. Together, these studies use daily diary approaches to examine how family relationships influence emotional, physical, and cognitive reactivity to diverse stressful experiences. Melissa Franks will share her expertise on aging families and chronic disease to draw parallels across the studies and offer recommendations for future research on family relationships, health, and well-being.

HUSBANDS AS NATURALLY OCCURRING STRESSORS: DAILY STRESSORS AND WELL-BEING IN OLDER COUPLES

K.E. Cichy¹, R.S. Stawski², D. Mroczek³, A. Spiro⁴, D. Almeida², 1. *Human Development and Family Studies, Kent State University, Kent, Ohio*, 2. *The Pennsylvania State University, University Park, Pennsylvania*, 3. *Purdue University, West Lafayette, Indiana*, 4. *Boston University, Boston, Massachusetts*

Prior research emphasizes the benefits of marriage in later life, particularly for husbands. Still, older couples are not immune to negative interactions. Gender differences in marital roles may contribute to older wives reacting to not only their own stressors, but also to their husbands' stressors. A total of 96 dyads (Mean age_{Husbands} = 75, SD = 6; Mean age_{Wives} = 71, SD = 8) completed measures assessing daily stressors and negative affect (NA) on eight consecutive days. Results revealed that both partners experienced significantly higher NA on days when they experienced arguments, overloads at home, and health-related stressors ($p < .05$). Only husbands exhibited increases in NA associated with experiencing avoided arguments and overloads at work ($p < .05$), whereas only wives exhibited increases in NA associated with network stressors ($p < .05$). Furthermore, husband's experience of daily stressors had an additional and unique effect on wives NA, but only for husband's arguments ($p < .01$).

SPOUSAL INFLUENCE ON DAILY FUNCTIONING IN KNEE OSTEOARTHRITIS

L.M. Martire¹, M. Stephens², J. Brach¹, F.J. Keefe³, R. Schulz¹, 1. *Psychiatry, University of Pittsburgh, Pittsburgh, Pennsylvania*, 2. *Kent State University, Kent, Ohio*, 3. *Duke University, Durham, North Carolina*

Knee osteoarthritis (OA) is a chronic, painful condition and a primary cause of disability in older adulthood. Among married patients, the spouse is likely to be the primary social influence on daily functioning. This dyadic study focused on older knee OA patients (average age = 70 years, range = 53 to 89; 61% female) and their spouses. Both partners used an electronic diary to provide daily data for 21 days regarding mood, patient pain, spousal responses to patient pain (i.e., empathic, insensitive, and solicitous responses), and spousal control of physical activity (i.e., autonomy support, persuasion, and pressure). Both participants also wore an accelerometer in order to measure daytime physical activity over the same 21-day period. Presented findings will focus on same-day and next-day associations between spousal influence and patients' daily functioning, and whether the effects of negative spousal communications have a greater impact on male patients than on female patients.

EMOTIONAL TRANSMISSION IN MARITAL COUPLES DEALING WITH STRESSORS SURROUNDING PROSTATE CANCER

C.A. Berg¹, D.J. Wiebe², J. Butner¹, 1. *Psychology, University of Utah, Salt Lake City, Utah*, 2. *University of Texas Southwestern Medical Center, Dallas, Texas*

The study examined how a person's mood is influenced by their spouse's mood, as spouses experience stressful events surrounding

prostate cancer. Emotional transmission may occur more frequently when couples are collaboratively engaged around stressful events. Fifty-nine husbands and wives completed diaries for 14 days reporting stressful events, collaborative coping, and positive and negative mood. Hierarchical Linear Modeling revealed that emotional transmission did not occur for positive emotion ($p > .5$ for husbands and wives), but did occur for negative emotion ($b = .11$, $p < .05$ for husbands, $b = .22$, $p < .01$ for wives). Negative emotional transmission was moderated by the amount of collaborative coping perceived across the 14 days. Transmission of negative emotion only occurred when spouses reported higher collaborative coping across the period. The results suggest that one potential downside to collaborative coping is the short-term cost to daily mood, despite the more general positive effects of dyadic coping.

PERCEIVED SOCIAL SUPPORT AND REACTIVITY TO DAILY STRESSORS AMONG OLDER ADULTS

R.S. Stawski¹, K.E. Cichy², J. Mogle³, M. Sliwinski³, *1. Pennsylvania State University, University Park, Pennsylvania, 2. Kent State University, Kent, Ohio, 3. Syracuse University, Syracuse, New York*

Research has shown that social support is an important factor contributing to health and well-being across the lifespan. Little research, however, has examined whether perceived social support (PSS) buffers older adults reactions to their naturally occurring daily stressors. The current study examined whether PSS from family and friends buffered emotional and cognitive reactions to daily stressors in a sample of old adults. Eighty-four older adults (Mage = 83; 27% Male) completed six sessions over a period of two weeks. At each session participants completed measures assessing their experience of daily stressors, negative affect, and cognitive interference. They also completed measures of PSS from both family and friends. Results revealed a significant three-way interaction between daily stressor occurrence, age, and PSS from family such that PSS blunted stressor-related increases in cognitive interference, but only amongst the oldest adults ($p = .01$). PSS from friends was not significantly predictive of reactivity to daily stressors.

SESSION 2090 (SYMPOSIUM)

CHALLENGES TO AL QUALITY: INSIDER VIEWS

Chair: *L. Morgan, UMBC, Baltimore, Maryland*

Discussant: *J. Hyde, UMBC, Baltimore, Maryland*

There is considerable interest in creating, sustaining and evaluating quality in long-term care, including the newer assisted living (AL) sector. This symposium addresses structural, temporal, interactional, fiscal and regulatory challenges to high quality of life in AL. Papers present results from a mixed method, NIA-funded study (Stakeholders' Models of Quality in Assisted Living) that used semi-structured interviews with 77 residents, 52 staff, and 57 family members to identify bases upon which they judge quality. Questions identified elements of daily life that mattered to themselves/their relatives/residents for a good/bad day, or that they would change if they were in charge. The audio-recorded interviews identified a wide range of quality criteria, both within and across respondent groups and settings in the study. As a newer and less-clearly defined alternative in long-term care, the sector faces daily challenges to enact its distinctive philosophy while meeting diverse and changing needs/preferences of its residents, as well as operational, regulatory and fiscal goals. After an initial orienting paper (1) that outlines our dynamic view of quality, remaining papers focus on findings including; 2) specific challenges encountered by adults residing in a collective environment; 3) the multiple, and sometimes contradictory, expectations of staff roles within AL settings; 4) balancing service, regulatory and fiscal goals; and 5) the challenge to researchers of translating research findings to consumer and provider audiences. Quality implies meeting diverse expectations from multiple interested stakeholders that require daily negotiations and problem-solving to maximize quality.

RULES, REGULATIONS, AND QUALITY IN AL

L.J. Clark, J.K. Eckert, E. Roth, *Center for Aging Studies, UMBC, Baltimore, Maryland*

Assisted living settings operate under certain rules and regulations imposed by the state, administrative and corporate structures, and setting-specific boards and directorships. Often, quality is assessed by static measures of how well ALs follow these; yet, our research indicates that such rules and regulations do not capture the dynamic elements of quality, and can impede the delivery of quality care and services. This paper discusses how oversight from external bodies competes with ongoing efforts of residents, staff, family, and administrators to achieve quality in AL. Our findings describe the impact of rules and regulations about the physical plant, staff training, medication, food preparation and variety, on the experience of everyday quality within ALs. These findings are relevant to AL providers and policymakers, as they provide insight into how the current procedural and regulatory milieu impacts the experience of quality by those who live, work, and visit in AL.

THE DYNAMICS OF ASSISTED LIVING QUALITY: A MULTIFACETED AND MOVING TARGET

L. Morgan, J. Eckert, *UMBC, Baltimore, Maryland*

Quality evaluation often employs surveys or consumer satisfaction studies. This paper outlines two critiques of traditional approaches to quality assessment. Employing data from interviews with residents, staff and family members from 7 AL settings, results show that quality is complex, contested, and dynamic through time. Critique 1 addresses how participants' frames of reference shape priorities for what matters most to quality. Variations among residents, between residents, kin and staff; and across the settings suggest that quality criteria are not uniform or widely shared. Critique 2 addresses how changes over time in both residents and in AL settings shift the quality equation. Suitability of a setting is shaped not just by a given resident's preferences and needs but also by changes in ownership, leadership or services of the AL. Both of these critiques question traditional measurement of quality; complexity and change are at the heart of the AL quality challenge.

AT THE THRESHOLD OF INSTITUTIONAL LIFE: THE CONUNDRUM OF RESIDENT INDEPENDENCE AND RELIANCE

A. Frankowski, L.J. Clark, *UMBC, Baltimore, Maryland*

Assisted Living (AL) sits at a pivotal point between a loosely configured collective living environment and a structured institutional setting. Often called a "soft" institution, the AL presents pragmatic challenges for residents who expect and rely on needed services while also enacting independent choices. This paper examines how perceptions of quality within the soft institution of AL are affected by (1) the ways in which residents' conceptions of independence and choice are moderated by the AL and (2) how residents are able to balance their individual expectations of collective living with the institutional rules in place at the formalized setting. The authors present findings on the intricacies of negotiating space (public and private, shared and individual), social interaction (activities and daily routines), and medical needs (medication management and functional assistance) with the realities of living collectively.

TOWARD A CULTURE OF CARING

L. Keimig, E. Roth, *University of Maryland Baltimore County, Baltimore, Maryland*

Perceptions of quality in assisted living depend largely on interactions with direct care staff. This paper explores the deeper aspects of providing quality care in these settings, based on a narrative analysis of in-depth interviews with 186 staff, administrators, residents, and families. Findings focus on the relational aspects of care: personal warmth and attention, staff orientations and attitudes, sensitivity in handling bodily needs, and spirituality, especially at the end of life. Our findings

illustrate how direct care workers, despite experiences with inadequate staffing, low pay, and complex rules and regulations, make personal and meaningful connections, bring comfort to those in their care, and serve as exemplars of quality in assisted living.

TRANSLATING QUALITY TO PRACTICE

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To improve health and well-being, research must be translated into practical applications. NIH has made translational research a top priority for bench science application to clinical practice, and the need for translational research is no less important for behavioral and social sciences research. This project on the perceptions of quality in AL has made practical application of results a top priority and accomplishes this task by: 1) expressly engaging residents, family members, caregivers, supervisors, and administrators on the topic of quality in AL; 2) analyzing data to derive their "take away" messages in jargon free language; 3) separating the methodological discussion so important to social science researchers from the practical message relevant to consumers and providers; and 4) focusing on actionable suggestions for providers and consumers. Examples to be discussed include applying concepts of quality when marketing and selecting a residence, and acting when quality goes awry.

SESSION 2095 (PAPER)

EDUCATING GERONTOLOGISTS

GERONTOLOGIZING ACADEMIA

T.A. Abramson, *Behavioral Science, New York Institute of Technology, Old Westbury, New York*

The shortage of trained professionals and academic programs to train students to work with an older adult population has been well documented. The growth of the older cohort and the lack of professionals to work with older adults across disciplines is of great concern and requires creative solutions to meet this growing need. Senator Boxer's Bills currently in front of the House and Senate as well as work groups are important steps for the future. What must be considered are the current emerging professionals and the training, or lack therefore, being received in academic settings. To address this question a survey was conducted of all faculty in a medium sized suburban University that includes a school of Osteopathic Medicine. Survey data revealed that the majority of courses offered are not specific to aging, but a slightly higher percentage of the courses did include some, although minimal, aging content. About half of the faculty indicated that textbooks contain some aging content, whereas visuals do not. Many faculty indicated finding ways to bring aging content into their courses, particularly those from the medical school. Only 50% of the faculty felt there was a need for additional aging content in their courses. These findings indicate that there is a great need to begin the process of gerontologizing academic settings with creative solutions if there is any hope of increase the aging workforce. Faculty also rated what would be most helpful in bringing aging into their courses. These ideas are key to finding creative ways to address the pending workforce shortage.

CREATIVE APPROACHES TO AGING CURRICULAR INFUSION: BUILDING STUDENT GERONTOLOGICAL COMPETENCIES

R.P. Bonifas, T. Kennedy, *School of Social Work, Arizona State University, Phoenix, Arizona*

Curricular infusion efforts to gerontologize social work education have been identified as effective strategies for preparing social workers for practice with older adults, regardless of their primary specialization area (Hooyman, 2006; Hooyman, 2009). Gerontological social work

competencies serve as a valuable mechanism for assessing learning outcomes of such interventions (Damron-Rodriguez, Volland, Wright, & Hooyman, 2009) and provide an important basis for evaluating the impact of gerontological curricular infusion efforts on student learning (Hooyman, 2006). This paper examines one MSW program's involvement in the Gero Innovations Grant Masters Advanced Curriculum Project and reports preliminary results regarding the affect of gerontological curricular infusion on MSW students' self-assessed mastery of gerontological competencies within a newly implemented health/behavioral health concentration. Infusion strategies included standardized teaching modules, a standardized client interview, and a standardized case study infused in non-aging practicum settings. Following exposure to the gero-enriched curriculum, students made gains in several gerontological competencies, with the greatest gains among students with no prior exposure to older adults. This finding suggests the need for additional strategies to improve competency gains for students with previous formal or informal contact with older adults. Although students viewed gerontological content as an important component of an MSW education and 80 percent anticipated employment in multigenerational practice settings, they were less likely to recognize the linkage of gerontology to their own careers. This finding replicates results of previous research (Fredriksen-Goldsen & Bonifas, 2005; Fredriksen-Goldsen, Bonifas, & Hooyman, 2006) and highlights the importance of interventions that enable students to make this connection.

INTERDISCIPLINARY FACULTY SCHOLARS PROGRAM: LESSONS LEARNED

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The UAB Geriatric Education Center Faculty Scholars Program (FSP) is an interdisciplinary training program designed to improve the quality of health care for older adults. Geriatric training is provided to Faculty Scholars (FS) in priority areas identified by the Institute of Medicine (advanced illness, care coordination, frailty, symptom and medication management, ethnogeriatrics, and health literacy). Ten FS representing medicine, dentistry, social work, psychology, nursing, physical and occupational therapy completed 36 hours of geriatric training. Health literacy and cultural competency were integrated into all the above mentioned content areas (4 quarterly in-person sessions and 8 web-based modules). The average improvement for web-based curriculum ranged from 4% to 30% (average improvement = 16%). All faculty completed action plans and 3 FS introduced geriatric content into classes presented to 227 graduate and undergraduate students. Other FS have plans to integrate content into their 2009-10 classes. All scholars planned and participated in two workshops at the Alabama Gerontological Society Annual Meeting. Six of the FS students have poster presentations at this meeting. Two focus groups were conducted during the year to evaluate the process and content of presentations. All faculty strongly supported the interdisciplinary interaction requesting additional face-to-face meetings, the formation of an alumni group and the opportunity for continued participation and working with the new group of FS. These suggestions have been incorporated into the Year 2 Program. After attending this activity, participants will be able to discuss the opportunities and challenges regarding faculty recruitment, curriculum modification, program implementation and evaluation.

THE ELDER PROJECT: EDUCATIONAL MODEL AND 3-YEAR OUTCOMES OF A COMMUNITY-BASED, FEDERALLY FUNDED INITIATIVE

J. Lange, P. Greiner, D. Mager, *Fairfield University, Fairfield, Connecticut*

Purpose: The purpose of the ELDER (Expanded Learning and Dedication to Elders in the Region) Project was to address the needs of under-

served older adults by providing continuing education to individuals who provide nursing care to older adults in community health centers, home health agencies, and long-term care facilities. Four agencies located in a Health Professional Shortage and Medically Underserved Area participated. Model: Project staff conducted separate focus groups with administrators and staff at each agency to determine educational needs and preferences. Curricula from the Hartford Institute and Geriatric Education Centers were adapted to design unique curricula for each agency and level of personnel (licensed nurse or unlicensed caregiver). Simulation exercises during year three facilitated teamwork and interprofessional communication. Outcomes: Sixty-seven nurses and nursing aids as well as seven administrators, physical or occupational therapists, social workers and a physician participated. Evaluations conducted by an independent consultant were highly favorable. Simulations demonstrated participants' ability to integrate best practices into typical clinical scenarios, and revealed improved communication among care providers. Implications: Tailored, on-site education incorporating simulation is an effective model for translating gerontological knowledge into practice and improving the care of older adults in multiple settings.

DEMOGRAPHIC AND EPIDEMIOLOGICAL IMPLICATIONS OF POPULATION AGING AND THE IMPACT ON TEACHING HOSPITAL ADMISSIONS AND UNDERGRADUATE EDUCATIONAL EXPERIENCES

J. Da Silva, L. Soares, P. Carvalho, G. Silva, *UFRJ / EEAN, Petropolis - RJ, Rio de Janeiro, Brazil*

Study developed with three undergraduate nursing students and their advisor based upon a proposal derived from clinical practice at Anna Nery School of Nursing / Federal University of Rio de Janeiro. The research team used quantitative data from three Brazilian databases, two national (IBGE and DATASUS) and one local (HUCFF) to study the phenomenon observed during school activities: an increasing number of older adults across floors and specialty clinics in the Teaching Hospital. The study objectives were to describe the socio-demographic-clinical profile of patients, its impact and potential challenges for nursing professional practice and teaching-learning experiences of an undergraduate curriculum that emerges from practice. The method included: first, the development of a spreadsheet to include socio-demographic data, length of stay, and the International Disease Classification Codes; second, data collection on the databases; and third, the organization and analysis of a newly generated database. Preliminary descriptive statistics indicate that when compared to the population, the number of older adults admitted to hospital was higher than younger adults. More specifically, in Rio de Janeiro State admissions of older adults represented 46% of all admissions. Results and knowledge produced were shared with nursing and medicine undergraduate program directors and resulted in a first multidisciplinary optional course offered jointly by the schools of Nursing and Medicine - optimizing the use of resources for a more refined care for critically ill or highly complex older patients, such as those in a Teaching Hospital.

WORKFORCE NEEDS FOR GERONTOLOGICAL EDUCATION AMONG NEVADA BUSINESSES

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Between the years of 2000-2007, Nevada's senior population aged 65+ years increased by 30%; faster than the national average growth of 8%. With the aging of the nation's baby boomers, Nevada's senior population is projected to grow at a rate of 264% between the years 2000-2030. In light of this projected increase in senior population, the Gerontology Academic Program at the University of Nevada, Reno created a statewide survey of Nevada businesses. The survey of businesses had two purposes: 1) to understand the need for gerontological training among employees and employers; and 2) assess the familiarity and aware-

ness level of the University of Nevada, Reno's online 24 credit gerontological training certificate. Preliminary data from 170 surveys (111 aging-specific entities; 59 non-aging specific surveys) revealed that 54% of the aging specific entities, and 1% of the non-aging businesses reported our gerontology certificate to be at least a little useful; 20% were already familiar with our certificate. Further, the more aging-related issues experienced ($M = 3.2$) in the workplace (e.g., retirement planning) was significantly correlated with greater interest in gerontological training ($r = .30, p < .001$). The results have implications for employer-employee relationships and gerontological education training needs in the context of the workplace. Discussion will revolve around how the findings inform us about the barriers and challenges occurring in the intersection between business and aging.

SESSION 2100 (PAPER)

HEALTH DISPARITIES AND AGING

FOOD AVOIDANCE AND MODIFICATION INFLUENCE DIETARY QUALITY AMONG MULTI-ETHNIC OLDER RURAL ADULTS

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Self-management of oral health deficits by older adults may lead to declines in overall diet quality. As chewing or swallowing certain foods become difficult, individuals may avoid these foods or modify their preparation. This population-based survey of oral health and diet among adults 60+ years included a random sample of 635 stratified by gender and ethnicity (African American, American Indian, white) recruited from rural North Carolina. Respondents completed in-home interviews documenting usual dietary intake and food avoidance and modification due to oral health problems. Health Eating Index-2005 scores (HEI-2005) were calculated using dietary data. 43% had <8 years of education and 32% had incomes below the poverty level. 72% of participants avoided and 74% modified at least one food because of the condition of their mouth or teeth. Apples, nuts, candy, and carrots were the most frequently avoided foods. When asked about modifying apples, carrots, meats, beans, or greens, apples were most frequently mentioned (68%) and nuts least often (24%). After adjusting for age, gender, ethnicity, poverty, and education, as more foods were avoided, the total HEI-2005 score decreased ($p < 0.0001$). HEI scores increased (improved) as more foods were modified ($p = 0.0033$). Regardless of the number of foods avoided, those who modified 4-5 foods had total HEI-2005 scores that were 6% higher than those who modified 0-3 foods. Overall diet quality among this population could be improved if nutrition education promoted active self-management through food modification among those limiting their food choices due to oral health deficits. (NIH Grant R01-DE17092)

IS ELIMINATING HEALTH INEQUALITIES BETWEEN SOCIOECONOMIC AND RACE/ETHNIC GROUPS REALISTIC? HOW LANGUAGE AND POLITICAL CORRECTNESS DISTORT OFFICIAL GOALS

J.S. Siegel, *J. Stuart Siegel Demographic Services, North Bethesda, MD, Maryland*

Eliminating health "disparities" between socioeconomic and racial/ethnic groups is a principal goal of various federal health programs. This paper offers a critical view of the concept of health "disparities," questions the possibility of eliminating them, and suggests a more realistic goal. Of the total gap between the measures of differences between groups, denoted inequality, the part of it considered unjust or unfair I denote inequity; a part of inequity is unavoidable. It is the avoid-

able part of inequity on which we should focus, i.e., those inequities relating to differences in access to health care and quality of care provided. Even in countries with universal health care and in segments of a population with equal access to care, class differences remain, whether we consider Medicare participants in the United States, civil servants in Great Britain, or the populations of Canada and the Scandinavian countries. Moreover, considerable differential variation within “cognizable” groups exists; i.e., unobserved heterogeneity is characteristic of the health status of every group. Intergroup, and possibly intragroup, differences are a result in large part of variations in the power status of persons in the work (and nonwork) hierarchy. It may be very difficult to narrow these differences as we try to raise the health level of the general population (cf., U.S. household income). The greatest hope for reducing the equitable part of inequality is to divert massive resources to modify the lifestyle and behavior of the “lower” socioeconomic classes. This effort has a fair likelihood of proving ineffective and of diminishing resources for research and development into new technologies for diagnosis and treatment of major chronic illnesses—a path so important to the “upper” classes. Achieving an elimination of group inequalities in health requires simultaneously achieving a society-wide elimination of educational, housing, income, and wealth inequalities, and even political power, and this is visionary.

HEALTH DISPARITIES AMONG AGING POPULATIONS IN LATIN AMERICA, THE CARIBBEAN AND ASIA

M. McEniry, *Center for Demography & Ecology, University of Wisconsin, Madison, WI*

While we know about many features of aging in developing countries (e.g. speed of aging), we know less about the determinants of health and how to fully explain health disparities in these settings. Early life circumstances may provide one clue in understanding the pattern of health disparities. Yet, there have been relatively few cross national studies which examine health disparities and early life conditions among older adult populations in the developing world. In this paper, I compare and contrast health disparities in older adults across a large and diverse set of countries and examine the degree to which poor early life circumstances help explain the observed pattern of health disparities. I include data from major studies on aging in Latin America and the Caribbean (MHAS-Mexico, SABE-capital or major cities, PREHCO-Puerto Rico, CRELES-Costa Rica), Asia (CLHLS-China, IFLS-Indonesia, MHSS-Bangladesh) and data from the US (HRS, WLS), the UK (ELSA), the Netherlands (SHARE) and Taiwan (SEBAS) to benchmark results. Health disparities within and across countries are compared using country-specific and pooled multivariate models to estimate the effects of SES (education, household income) on adult health (self-reported health, heart disease, diabetes, obesity, functionality) controlling for early childhood conditions (childhood health, SES, markers of nutritional status, mother's education), and adult risk factors (smoking). There is some, although weak, evidence that individuals who have been unduly influenced by early life conditions exhibit sharper health disparities. It will be important to design effective health policies to prepare for health needs of older adults in these settings.

THE EFFECTS OF RACE, SOCIOECONOMIC STATUS, AND HEALTH CARE USE ON SELF-RATED HEALTH AMONG OLDER ADULTS

J. Sautter, *Sociology, Duke University, Durham, North Carolina*

In this paper I explore the effect of race on self-rated health among older adults. I examine several mediating pathways, including socioeconomic status, social support, and healthcare behavior. I analyze data from the fourth wave of the Americans' Changing Lives Survey, collected in 2001/2. I find significant Black-White differences in self-rated health, education, family income, use of preventive care, and delaying or foregoing prescription medicine due to lack of insurance or money. Results from nested logistic regressions show that Black respondents

have higher odds of poor self-rated health than White respondents, and that this difference is mediated by socioeconomic status, particularly income. I find striking effects of healthcare behavior on self-rated health. Respondents who trust doctors have decreased odds of poor self-rated health, and respondents who delay or forego prescription medicine due to lack of insurance or money have much higher odds of poor self-rated health. The effect of delaying or foregoing prescription medicine on poor self-rated health is even stronger among White respondents, and non-significant among Black respondents. These results highlight new pathways to poor health and health disparities in older age. Although healthcare is supposed to be universal, there are significant racial differences in use of healthcare driven by socioeconomic status and inability to pay.

IMPROVING BLOOD PRESSURE IN HYPERTENSIVE LATINO OLDER ADULTS: QUALITATIVE PHASE OF A MIXED-METHODS STUDY

S. Fernandez¹, M. Rosal², F. De la Calle¹, E.T. Carbone³, A. Borg², G. Ogedegbe¹, 1. *Medicine, New York University School of Medicine, New York, New York*, 2. *University of Massachusetts Medical School, Worcester, Massachusetts*, 3. *University of Massachusetts Amherst, Amherst, Massachusetts*

Efficacious behavioral interventions for controlling blood pressure (BP) are underutilized with hypertensive Latino older adults, a group with low BP control rates and a related higher risk of mortality. Methods: Phase 1 of this two-phase study of Spanish-speaking Latino older adults includes focus groups and cognitive interviews to gain insights on knowledge, attitudes and behavioral skills for hypertension self-management among older Latinos; use of these data to tailor intervention strategies and materials; pre-test clarity of strategies and materials. Phase 2 includes a small RCT of feasibility and impact of a group-based behavioral intervention for hypertension (HTN) in senior centers. A trained facilitator conducted three Spanish-language 1.5-hour groups, assessing HTN-related knowledge and attitudes; behavioral skills related to therapeutic lifestyle changes. Twenty-nine Latino seniors participated (mean age = 71.91 years [SD = 6.74]; 90% female; 59% 11th grade education or below; 62% widowed or divorced; 38% Dominican, 28% Puerto Rican, 17% Ecuadorian). Phase 2 begins the summer of 2009. Results: Emergent themes reflected a range of knowledge of lifestyle changes to improve BP, biomedical and non-biomedical beliefs regarding the etiology of HTN, belief in the inevitability of disease, language as a barrier to adopting lifestyle change, and participant learning style preferences. Conclusions: RCT intervention will include (1) use of plain language and pictures; (2) in-class demonstration of self-management skills (e.g. reading food labels, relaxation techniques, use of pill boxes) (3) in addition to education on behavioral skills for improving blood pressure, emphasis on education regarding etiology of HTN, stress and health, healthy aging.

SESSION 2105 (SYMPOSIUM)

INNOVATIVE RESEARCH IN LATE-LIFE DEPRESSION: FROM CLINICAL EPIDEMIOLOGY TO TREATMENT DEVELOPMENT

Chair: J. Evans, *Geriatrics Research Branch, National Institute of Mental Health, Rockville, Maryland*

Discussant: C.F. Hybels, *Duke University, Durham, North Carolina*

Major Depressive disorder is one of the most common mental health problems among older adults and often may be difficult to detect in this population. Furthermore, issues with co-morbidity and frailty often contribute to incomplete response to treatment. Research in this area has demonstrated the need for better detection and treatment alternatives that may be useful in this population. This symposium will highlight current work in behavioral science and clinical epidemiology research in late-life depression. Presentation topics will include: (1)

Cognitive changes after antidepressant treatment among older adults; (2) Culturally informed treatment for late-life depression in a sample of African American women; (3) A population study of the risk of suicide across the lifespan; and (4) Epidemiological research examining ethnic differences in the prevalence of major depressive disorder among older adults. An integrative discussion will provide synthesis of this work in relation to other aspects of late life mental health research and other opportunities for innovative work in this area.

FEASIBILITY OF THE OH HAPPY DAY DEPRESSION INTERVENTION (OHDDI)

E.C. Ward, *University of Wisconsin-Madison, Madison, Wisconsin*

The primary aim of this study was to examine the feasibility and acceptability of the OHDDI intervention. In an effort to improve depression care for older African American women, interventions need to be culturally congruent with the needs, preferences, and cultural learning styles of this largely underserved and under-researched population. The OHDDI was developed to address this deficit. The OHDDI is a 90-minute weekly cognitive behavioral group counseling intervention for 12 weeks. A one-group pretest-posttest design was used. The sample consisted of 13 African American women aged 60 and over with depression symptoms. Outcome evaluations were conducted at baseline, weeks 6, 12 and 24 using standardized instruments. Qualitative interviews were conducted with participants between weeks 12-14 to explore acceptability of the intervention and the experience of late-life depression. Results indicate the intervention was effective in reducing symptoms of depression. Study results and directions for future research will be presented.

EPIDEMIOLOGY OF LATE-LIFE DEPRESSION AND ETHNICITY RESEARCH STUDY (ELLERS)

H. Gonzalez¹, K.E. Whitfield², W. Tarraf¹, *1. Gerontology, Wayne State University, Detroit, Michigan, 2. Duke University, Center for Biobehavioral and Social Aspects of Health Disparities, Durham, North Carolina*

Currently, depression is a leading cause of disability in the United States and will continue to ascend in importance as the population continues to grow older over the coming decades. For older adults, national prevalence estimates of "true" depressive disorders meeting established diagnostic criteria date three decades back to pioneer psychiatric epidemiologic work in the nineteen-eighties. Demographically, much has changed over the past twenty-years in the public health of the United States and internationally. Middle-aged "baby boomers" are now entering retirement age and Latinos, largely ignored until the turn of the millennium, are now the largest ethnic minority in the country. We will provide updated national estimates of "true" depressive disorders in older adults of major ethnic/racial groups in the United States. These products will offer insights for opportunities for late-life depression prevention in an aging and increasingly diverse United States population.

HERITABILITY OF FATAL SUICIDAL BEHAVIOR ACROSS THE LIFESPAN IN THE SWEDISH TWIN REGISTRY

A. Fiske, *Psychology, West Virginia University, Morgantown, West Virginia*

Older adults are at an elevated risk of dying by suicide compared to other age groups. Depression, which is a risk factor for suicidal behavior at all ages, is more closely linked with suicide among older adults than among younger individuals. Studies of nonfatal suicidal behavior, as well as selected samples of twins who died by suicide, suggest that genetic factors may contribute to risk. Nonetheless, no population-based study has yet evaluated the extent to which genetic factors may contribute to risk for fatal suicidal behavior. The present study investigated the heritability of fatal suicidal behavior in the population-based Swedish Twin Registry. Among twins born in Sweden between 1886 and 1958, there were 561 suicides through 2003. Structural equation twin models

were used to estimate heritability and investigate the extent to which genetic risk differs across the lifespan.

CHANGE IN COGNITIVE FUNCTIONING FOLLOWING ACUTE ANTIDEPRESSANT TREATMENT IN LATE-LIFE DEPRESSION

M. Culang¹, J. Sneed^{2,3}, J. Keilp^{2,3}, S.P. Roose^{2,3}, *1. City University of New York, New York, New York, 2. Columbia University, New York, New York, 3. New York State Psychiatric Institute, New York, New York*

The association of late-life depression and cognitive impairment has been well documented. However, there have been few placebo-controlled trials examining the impact of SSRIs on cognitive functioning. Pre-post neuropsychological data collected as part of an 8-week, double-blind, placebo-controlled trial of citalopram in depressed patients aged 75 years and older were used to examine change in cognitive functioning as a function of responder status and treatment condition. Responders in the citalopram group significantly improved in visuospatial functioning over the course of treatment when compared to non-responders. Furthermore, citalopram non-responders showed a significant decline in verbal learning when compared to placebo non-responders. The present results suggest that, in late-life depressed patients aged 75 and over, citalopram may interfere with the normal practice effect in verbal learning. In addition, our findings imply that non-responders should not be maintained on medication that may have a negative effect on some aspects of cognitive functioning.

SESSION 2110 (SYMPOSIUM)

INTEGRATING SPIRITUAL INTERVENTIONS INTO OLDER PERSONS' CARE: IS IT ETHICAL AND FEASIBLE?

Chair: *S. Monod, Service of Geriatrics, Lausanne University Medical Center, Lausanne, Switzerland*

Discussant: *C.J. Bula, Service of Geriatrics, Lausanne University Medical Center, Lausanne, Switzerland*

Multiple studies have documented a significant association between spirituality and health. Although spirituality is usually considered as a positive resource for coping with illness, spirituality might also influence negatively health outcomes. Spiritual distress has been associated with increased mortality, more severe depression, and desire of hastened death, suggesting a potentially harmful effect on patients' prognosis and quality of life. These observations support the growing interest toward implementing spiritual interventions, but it remains unclear whether such interventions are feasible and effective. This symposium will discuss ethical and feasibility concerns that emerge when considering to implement spiritual interventions into standard care provided to elderly persons. The first presenter will address ethical issues raised by the integration of spiritual care into standard care. Particularly, the conditions under which such integration can be fruitful will be discussed. The second presenter will discuss the issue of spirituality intervention in older people living with HIV. This paper will address the spiritual resilience of those living with HIV and discuss options for spiritual interventions to improve life quality and foster effective aging. The third presenter will discuss a model of spiritual intervention in elderly patients undergoing rehabilitation. This model of spiritual intervention is fully integrated into rehabilitation care, and based on a structured approach aimed at assessing patient's unmet spiritual needs. The symposium will be concluded with a discussion arising from the presentations.

NARRATIVE PERSPECTIVES ON SPIRITUAL INTERVENTIONS IN THE CARE OF ELDERLY PATIENTS

G. Jobin, *Theology, Laval University, Québec, Quebec, Canada*

Geriatrics and gerontology are domains of care where it seems possible and fruitful to integrate spiritual care into standard care provided to elderly persons. In fact, this preoccupation is relayed by doctors, nurses, social workers, among many, and pastoral care providers. But

such an integration is done with the risk of blurring the boundary between clinical care and spiritual care. Under the guise of holistic care, it is sometimes difficult to distinguish the prerogatives of spiritual care providers from those of other care providers on «spiritual matters». Based on an «applied narrative perspective», this paper will present the challenges brought by this integration of «spiritual» care into clinical care and the conditions under which such an integration can be fruitful.

DESIGNING SPIRITUAL INTERVENTIONS FOR OLDER ADULTS WITH HIV: OVERCOMING STIGMA AND ACTIVATING SPIRITUAL RESOURCES

D. Vance¹, M. Brennan², *1. School of Nursing, University of Alabama at Birmingham, Birmingham, Alabama, 2. AIDS Community Research Initiative of America (ACRIA), New York, Alabama*

Spirituality has both positive and negative connotations for older adults living with HIV, who will constitute one-half of HIV cases in the USA within the next decade. Many faith-based organizations have responded compassionately to those with HIV, and have provided spiritual, emotional, and material comfort for these individuals. However, many older people with HIV have also experienced rejection from their spiritual communities due to HIV stigma and stigma related to risk for HIV infection (i.e., intravenous drug use, homosexuality, incarceration). Research has found that levels of spirituality in this population are comparable to other groups, and spirituality has emerged as an important covariate of better outcomes in this population, namely, less depression and better medical treatment adherence. This paper will address the spiritual resilience of those living with HIV and discuss options for spiritual interventions to improve life quality and foster effective aging for this emerging group of older adults.

SPIRITUAL CARE INTEGRATED INTO REHABILITATION CARE FOR ELDERLY PERSONS: A STRUCTURED APPROACH

S. Monod, E. Rochat, C.J. Bula, *Lausanne University Medical Center, Lausanne, Switzerland*

In elderly patients undergoing rehabilitation, spiritual distress has been associated with higher depression rate and tends to be associated with worse rehabilitation outcomes. This paper will present a spiritual intervention concept, fully integrated into elderly rehabilitation care, aimed at addressing spiritual distress and improving patient's spiritual state. This intervention is based on a structured assessment that identifies patients' unmet spiritual needs. Results of this assessment, including the degree to which spiritual needs remains unmet, are transmitted by the chaplain to health professionals. To preserve confidentiality, transmission of the spiritual assessment is performed without disclosing patient's intimate details. The chaplain suggests follow-up discussions, as well as possible interventions to address identified unmet spiritual needs. These propositions include interventions carried out by the chaplain directly with the patient and/or indirectly through health professionals counseling. Expected benefits for patients of this spiritual intervention concept will be discussed and illustrated with preliminary results.

SESSION 2115 (PAPER)

OPINIONS, ATTITUDES, AND STEREOTYPES: IMPACT ON PERSONAL AND COLLECTIVE HISTORY

DISPROVING OLD AGE STEREOTYPES: SOCIAL CAPITAL AND COMMUNITY PARTICIPATION AFTER HIP FRACTURE

M. Harrod, H. Moilanen-Miller, M. Luborsky, *Wayne State University, Detroit, Michigan*

End-of-life and frailty stereotypes still dominate popular thinking of older adults by neglecting how individuals along with their social net-

works rearrange their environments to accommodate ever-changing abilities. This paper explores the reality of those stereotypes by examining the social worlds of older adults after a life-altering injury. Social capital provides a unique framework to explore community participation from both individual and social network perspectives. Putnam defines social capital as, "...features of social organization such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefit," (1995, p. 67). Community participation affords access to social capital that individuals utilize to define who they are and who they are not. Using qualitative methods, this study interviewed 100 older adult participants who had sustained a hip fracture within the last 8 years. Major domains are lifetime community involvement, reengagement after injury, and alteration of community activities. Lifetime community involvement was examined over the individual's lifespan to better understand how community participation is a continuum that must be modified given life events. Analysis of the domain, reengagement after injury, showed that older adults find ways to negotiate and reengage in their communities activities by utilizing their existing social environments. Through alteration of community activities, older adults illustrate their independence and inventiveness in the ways in which they alter their activities and environments in order to maintain a full and active community life. These domains, in conjunction, reveal variable aspects to community participation that negate the foundations of aging stereotypes. [NIH Grant 5R01AG023572-03]

NEWSPAPER PORTRAYALS OF SSCANDALS IN AMERICAN NURSING HOMES: ISSUES OF INTRA-GENERATIONAL INEQUALITY, 1998-2008

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Newspaper portrayals of nursing homes influence how long-term care institutions are viewed and understood by the society. This research examined how scandals in nursing homes were portrayed in the American press during 1998-2008. The data sources included more than 10,000 articles focusing on nursing homes, retrieved from 82 newspapers published in the capital and the largest city of each state. A representative subsample of 300 articles (30 per year) was analyzed thematically using the constant comparison method. Nursing homes were discussed in five contexts, including: family, end-of-life, elder abuse and neglect, financial misconduct, and health care policy and regulation. Emerging findings indicate four themes that capture issues pertaining to nursing home scandals. The background theme, apocalyptic demography, presents the raising costs of institutional eldercare due in part to growth of vulnerable populations as a budget buster. The premature death theme developed from the early 2000s when nursing homes were identified as locales of avoidable deaths due to misconduct of staff and authorities. The intra-generational inequality theme in the aftermath of hurricane Katrina raised the issue of disposable lives. Stories suggested that seniors whose compromised health is compounded by racial, gender, and class disadvantage were often left behind when other people were escaping. The fourth theme, social responsibility for eldercare, underscored the society's moral duty to frail elders, but positive images tended to be focused on more privileged white older adults. This analysis illustrates how sensational portrayals of nursing homes may shape changes in public policy pertaining to long-term care institutions.

CAROLINAS CONVERSATIONS COLLECTIONS: A GERONTOLOGY RESOURCE

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Expected to be open to researchers in late 2010, the Carolina Conversations Collection offers a password-protected web portal of conversational interviews with persons over 65 years of age from diverse racial, ethnic, and linguistic groups from North and South Carolina. Participants discuss a variety of 11 chronic conditions, including Alzheimer's, cancer, diabetes and hypertension as well as their experiences maintaining their health and using health services across their lifetimes. Audio and video recordings and transcripts are synchronized by an online digital management package that supports downloadable analyses at the level of sound, word, and syntax. Roughly 75 unimpaired persons are interviewed twice: once by graduate/medical students acting as providers and once by gender, race and age-concordant community partners. A similar number of cognitively impaired elders are arrayed longitudinally, speaking either with researchers or student volunteers. This presentation details how the archive was developed and the precautions taken for security, the password process for access, and the organization of the unique website for potential investigators. Examples of conversations will demonstrate search and retrieval strategies and the integrated programs that can be used for speech analysis and analysis as a corpus of language data. Demonstrations will include the training approach for students and community interviewers geared to more effective communication with older people. Funded by the National Library of Medicine, the Collection stands as a model for the mediated organization of spoken data for secondary analysis for the study of communication and aging.

WAR IN LIFE STORIES: LOSS, SURVIVAL, AND ALZHEIMER'S DISEASE

T. Hamaguchi, *English Language and Literature, University of the Sacred Heart, Tokyo, Japan*

This study will investigate the role of war and war-related events in life stories of a 97-year-old Japanese elderly woman before and after she suffered from Alzheimer's disease. Through analyzing tape-recorded life stories told at different points in time with different health statuses, I will demonstrate how the loss and survival surrounding the war are recounted, and how Alzheimer's disease affects the ways in which she treats the same experience. Although the two stories are qualitatively and quantitatively different, the war appears as a clear representation of distress in both stories. This is evidenced not only by the fact that she talks about the war in both stories but also by the fact that paralinguistic cues such as hesitations and long pauses are used the most in those segments. Moreover, in the second story (after the onset of AD), the war terminates the story development and nothing about her life after the war is told. I claim that the war serves as a sign of loss: family and house in the past; and memory and independence in the present life. However, a clear difference is that survival is highlighted in the first story while loss is highlighted in the second. In other words, the war is used as a life event through which she justifies her current self: happy survivor or pitiful sufferer. This study suggests that the same life experience can be recounted in significantly different ways depending on the health and cognitive status of the speaker.

A LIFE-COURSE ANALYSIS OF HEALTH AND FUNCTIONING ACROSS FOUR US WAR ERAS

M. Brooks, *US Army-Baylor, Fort Sam Houston, Texas*

There are 23.4 million living US veterans in the United States, consisting of 39.4% sixty-five or older. Relatively little is known about the long-term effects of war cohort membership on physical health outcomes across a life-course. This research uses a nationally representative survey of veterans to analyze four era cohorts of US veterans examining

measures of health and well-being, disability, prevalence and treatment of significant health issues. The research question was: Drawing on life-course theory, among US veterans, does physical health differ among war era cohorts and between combat and non-combat era veterans? Multivariate models controlled for age, gender, race/ethnicity, occupational status, marital status, environmental exposures, and mental health. Analysis was weighted for national representation. Adjusted odds of self-reported good health for Korean War veterans (OR 1.27); Vietnam War Veterans (1.07); and Gulf War Veterans (0.84) compared to veterans of WWII. Intra-cohort differences were noted. Combat veterans of Korea (OR 1.28); Vietnam (OR 1.09); and WWII (OR 1.16) all had higher odds of self-reported good health compared to non-combat veterans; Gulf War veterans were notably less likely (OR 0.83) (all $p < .0001$). Korea combat era veterans had significantly higher odds of being treated for rheumatism and lung issues; Gulf War Era veterans were more likely to have high blood pressure, lung, heart, stroke, and rheumatism issues compared to the older WWII cohort. As veterans age they will need substantial physical health services, often from the VA. Policymakers and practitioners alike need to plan for and address these needs.

SESSION 2120 (SYMPOSIUM)

PSYCHOSOCIAL INTERVENTIONS FOR OLDER ADULTS WITH VISION LOSS

Chair: S. Sorensen, *Psychiatry, University of Rochester School of Medicine and Dentistry, Rochester, New York*

Discussant: M.K. Diehl, *Colorado State University, Fort Collins, Colorado*

The risk of severe eye problems has been found to increase significantly with age, particularly among adults over age 65 (National Eye Institute, 2004). Older adults with vision impairment are at increased risk for falls and hospitalizations, they find it more difficult to take their medications properly, and they are more likely to be socially isolated, placing them at greater risk for physical health problems. Low vision reduces individuals' ability to engage in valued and enjoyable activities, thus increasing their vulnerability to depression and anxiety. Vision rehabilitation effectively increases patients' functioning using adaptive training and instructional programs. In this context, optometrist or ophthalmologist, as well as rehabilitation therapists assess the current abilities and goals of a patient. Clinic- or home-based rehabilitative training conducted by occupational therapist or certified low-vision therapist often improve older adults independent living skills. However, a focus on functional goals is often not sufficient to increase emotional adjustment, placing the vision-impaired older adult at risk for mental health problems. A variety of promising interventions have been or are currently being tested. We begin discussing the relationship of functional vision loss to leading causes of blindness and the role of the eye doctor in rehabilitation (Sterns). We continue with interventions that use Problem-Solving Treatment (Casten, Dreer, Horowitz) and group-based self-management training (Brody). Finally, we will discuss the elements that appear most effective and the extent to which these intervention approaches could be incorporated into regular low vision rehabilitation.

WHEN VISION FAILS: MEETING THE CHALLENGE

G.K. Sterns, 1. *Rochester General Hospital, Rochester, New York*, 2. *University of Rochester School of Medicine, Rochester, New York*

Vision loss can lead to loss of function and performance of activities of daily living in older adults. In many cases this can lead to depression and withdrawal. Many elderly think that vision loss is a normal part of aging and do not seek help to restore their vision and function. The nature of functional vision loss associated with leading causes of blindness will be presented. Solutions to improve function will be addressed, as well as the role of visual aids in rehabilitation. The responsibility of the ophthalmologist and eye care provider as a member of the rehabilitation team will be reviewed. In particular, their role is not only to

address the problem but also serve as a source of referral for care or to provide the care directly.

PSYCHOSOCIAL IMPACT OF AGE-RELATED MACULAR DEGENERATION AND EFFECTIVE INTERVENTIONS TO IMPROVE ADJUSTMENT

B.L. Brody, *Shiley Eye Center, University of California at San Diego, La Jolla, California*

The psychosocial impact of age-related macular degeneration (AMD) with permanent vision loss will be summarized, based on our research that showed high levels of emotional distress and disability (Williams et. al., 1998; Brody et.al., 2001). Findings will be highlighted from our randomized controlled trials of a 6 week, 12 hour AMD Self-Management Program. At 6-month follow-up, the positive outcomes found at 6 weeks were confirmed and extended: less emotional distress using POMS ($p=.008$); better function on NEI-VFQ ($P=.05$); increased self-efficacy ($P=.006$) (Brody et. al. 2005). Also, there was reduction in depressive symptoms in the depressed in the self-management compared to the controls ($p=.032$) after 6 months (Brody et. al. 2006). The incidence of clinical depression in the self-management group compared to the controls was 7.2% vs. 17.4%; $p = 0.04$, thus indicating that 50% of the new episodes of depression were prevented in the self-management group (Brody et. al., 2005).

PROBLEM SOLVING TREATMENT (PST) FOR OLDER ADULTS WITH SUBTHRESHOLD DEPRESSION IN VISION REHABILITATION

A. Horowitz^{1,2}, J.P. Reinhardt^{1,2}, *1. Department of Research, Jewish Home Lifecare, New York, New York, 2. Mt. Sinai School of Medicine, New York, New York*

We present an intervention development study to evaluate the use of PST with visually disabled elders to treat subthreshold depression within a rehab context. Subthreshold depression is more prevalent than major depression among chronically impaired elders, and has similar negative consequences for life quality and rehabilitation outcomes. However, PST has been primarily used to treat major depression, or to prevent depression among visually impaired elders. This pilot RTC is recruiting 60 older participants with subthreshold depression, applying for vision rehab services with random assignment to treatment (usual care + 6 sessions PST) or comparison (usual care + attention control) groups. Primary outcomes include depression diagnoses and symptom severity. It is also hypothesized that providing PST prior to or concurrent with vision rehab will contribute to better compliance with rehab treatments and better functional outcomes. We present the rationale, design, and implementation experiences, as well as preliminary study results.

PREVENTING DEPRESSION IN AMS

R. Casten, *Psychiatry, Thomas Jefferson University, Philadelphia, Pennsylvania*

This study tested the efficacy of Problem Solving Treatment (PST) to prevent depression in patients with bilateral AMD. Two hundred six subjects were randomized to PST or a control condition. Subjects were assessed at baseline, 2, and 6 months. The main outcome was depression diagnosis, and vision function was the secondary outcome. The incidence of depression was significantly lower in PST (11.6%) vs. control (23.2%) subjects at 2 months. PST subjects were also less likely to relinquish a valued activity (23% vs. 37%) compared to controls. These effects were not upheld at 6 months. The data also show that subthreshold depressive symptoms were a risk factor for a future depressive episode. This study demonstrates that PST can successfully prevent depression in patients with AMD in the short term. However, the effects are not maintained over time, suggesting that booster sessions may be needed for optimal depression prevention.

PRELIMINARY FINDINGS FROM A LARGE-SCALE RCT ON PROBLEM-SOLVING THERAPY (PST) FOR PERSONS IN LOW VISION REHABILITATION

L.E. Dreer, C. Owsley, G. McGwin, *Ophthalmology, University of Alabama at Birmingham, Birmingham, Alabama*

Objectives: This abstract has two objectives: 1) to characterize the quality of life related issues and rehabilitation needs of persons referred for low vision rehabilitation, and 2) to present preliminary data on the impact of a brief problem-solving therapy (PST) intervention on quality of life and rehabilitation outcomes among a large sample of persons entering low vision rehabilitation using a randomized clinical trial (RCT) design. **Methods:** As part of this ongoing RCT, approximately two-hundred and fifty patients entering low vision rehabilitation have been randomly assigned to either a usual care plus PST condition or usual care plus attention control condition as part of this ongoing RCT. PST was delivered for five sessions in addition to two one hour booster sessions at 6 and 11 months post-intervention. The content area of baseline and outcome measures include various aspects of quality of life (i.e., depression, anxiety, distress, rehabilitation). Measures for all subjects are administered at baseline, 3-month follow-up (post intervention), 7 month-follow-up (post 6 month booster session) and at 1-year follow-up (post 11 month booster session). **Results:** Prevalence and incidence rates of issues related to quality of life and rehabilitation will be presented along with an evaluation of changes in quality of life measures using a mixed effects statistical model. **Conclusions:** Findings will highlight the needs and issues of patients presenting for low vision rehabilitation services. If effective, PST delivered by occupational therapists (OTs) may help to enhance quality of life and rehabilitation outcomes among persons with vision loss. This type of brief intervention may prove to be a useful approach for integrating into multidisciplinary rehabilitation practices.

INCORPORATING PSYCHOSOCIAL INTERVENTIONS INTO LOW VISION REHABILITATION: POSSIBILITIES AND CHALLENGES

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An emerging body of evidence supports the effectiveness of psychosocial interventions for reducing distress and preventing depression among older adults with vision loss. In turn, depression and distress prevent older adults from pursuing needed vision rehabilitation. It remains unclear, however, how to incorporate cost-effective psychosocial interventions into standard low-vision rehabilitation practice in order to enhance both psychosocial and vision functioning outcomes. There are numerous barriers to providing such comprehensive eye care, e.g., matching desired outcomes with approaches that are reimbursed by insurance; cost-effectiveness; training rehabilitation specialists to be sensitive to mental health concerns. We will provide an overview of the psychosocial intervention activities (groups, counseling) conducted at the Association for the Blind and Visually Impaired (ABVI) – Goodwill Industries of Greater Rochester, Inc. Then we will contemplate how interventions involving Problem-Solving Treatment or Self-management can be better integrated in a cost-effective manner into existing low vision programs.

SOCIOECONOMIC DISPARITIES IN HEALTH, FUNCTION, AND COGNITION AMONG MINORITIES

Chair: R.J. Thorpe, *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Discussant: K.E. Whitfield, *Duke University, Durham, North Carolina*

A key objective of the public health agenda is to reduce, if not eliminate, health disparities. However over the past two decades little progress has been achieved as African Americans continue to exhibit poorer health, physical and cognitive functioning relative to whites. Many investigators believe race differences are a manifestation of SES differences, yet our understanding of SES disparities is limited because race and SES are confounded in the United States with African Americans having markedly fewer socioeconomic resources than whites. A key contribution to investigators' understanding of SES disparities is examination of SES differences and health, physical and cognitive functioning within racial groups, eliminating the confounding influence on race. This symposium highlights research focusing on SES differences and how multiple SES indicators affect several health outcomes. Thorpe and colleagues examine associations between SES indicators (income, education, financial strain) with disability and chronic conditions by age using a sample of African Americans in North Carolina. Using the same data, Szanton and colleagues examine the associations between childhood, adulthood and life course financial strain with several health outcomes. Sims and colleagues determine the impact of SES indicators (education, income, and perceived income inadequacy) on cognitive functioning in a sample of older African Americans in Maryland. Kelley-Moore and colleagues present data examining the SES gradient of functional impairment among African Americans and Whites using a national sample. These studies provide information that will bolster our knowledge of how SES contributes to development of interventions that will lead to reductions in health disparities.

SOCIOECONOMIC STATUS INDICATORS AND COGNITIVE FUNCTIONING IN OLDER AFRICAN AMERICANS

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Previous research indicates that socioeconomic indicators impact cognitive functioning and account for some of the racial differences in cognition in older adults. However, the relationship among these factors within ethnic groups is not well studied. The aim of the current analysis was to examine the relationships between cognitive functioning and socioeconomic status indicators (education, income, and how well income covers financial needs) among older AAs. Participants were 602 older AAs from the Baltimore Study of Black Aging that completed a battery of cognitive tests and provided information on socioeconomic background. Subgroups were created for levels of education (2), income (2), and how well income covers financial needs (4). Utilizing MANCOVA, the results showed that verbal memory, working memory, verbal ability, inductive reasoning, and global cognition performance is poorer among participants with lesser education, income, and coverage of financial needs. Implications of these findings will be discussed.

LIFE-COURSE FINANCIAL STRAIN AND HEALTH IN AFRICAN-AMERICAN ADULTS

S.L. Szanton¹, R.J. Thorpe², K.E. Whitfield³, 1. *School of Nursing, Johns Hopkins University, Baltimore, Maryland*, 2. *Johns Hopkins School of Public Health, Baltimore, Maryland*, 3. *Duke University, Durham, North Carolina*

Few studies have examined the cumulative effect of financial strain across the life-course. Using the population-based cross-sectional cohort of the Carolina African American Twin Study of Aging, we examined the associations between childhood, adulthood, and life-course, or cumu-

lative, financial strain with disability, lung function, chronic conditions, cognition, and depression. After adjusting for demographic and health-related characteristics (e.g., actual income, age, height, gender, smoking status), participants who reported financial strain at both time periods had a range of worse health outcomes when compared to their counterparts who did not; they were significantly more likely to be physically disabled (OR: 3.25 95% CI 1.67,6.26), have worse lung function ($p<0.05$), more depressive symptoms ($p<0.05$), and poorer cognitive functioning ($p<0.05$). Financial strain in adulthood was more consistently associated with poor health than childhood financial strain, a finding that suggests resolving adulthood financial strain could prevent disability, depression, and cognitive dysfunction.

BLACK-WHITE DIFFERENTIALS IN THE SOCIOECONOMIC GRADIENT OF FUNCTIONAL IMPAIRMENT

J. Lin, J. Kelley-Moore, *Sociology, Case Western Reserve University, Cleveland, Ohio*

High levels of socioeconomic status have been causally linked to elevated functional status, but whether this socioeconomic gradient is invariant across race groups remains a question. Given both differential access to resources and the inherent meaning of those resources between races, the socioeconomic gain to functional health may not be equivalent. This study uses four waves of panel data from the Americans' Changing Lives study to estimate age-graded growth curves of functional impairment among Black and White adults ages 45 to 85 years old. Our findings confirm a race differential in the inverse gradient between education and functional impairment that cannot be accounted for by selective survival or comorbidity. Specifically, holding income and wealth constant, the social gradient for education is steeper (more beneficial) for functional outcomes among White adults compared to Black adults. Alternatively, there were no Black-White differences in socioeconomic health gradient when measured by income or wealth.

SOCIOECONOMIC DIFFERENCES IN HEALTH AND DISABILITY BY AGE IN AFRICAN AMERICANS

R.J. Thorpe, *Johns Hopkins School of Public Health, Baltimore, Maryland*

One of the most well-established associations in the health literature is the relationship between socioeconomic status (SES) and health, but our understanding of the effect of age on the association between SES and health remains limited particularly among minorities. We investigated how SES differences in health and disability vary by age using a sample of 710 minorities from the Carolina African American Twin Study of Aging. SES measures included education, income, financial strain, and home ownership. After adjusting for gender, smoking status, obesity, and insurance status in our logistic regression models, we found that African Americans with low SES had a higher odds of having a disease or disability than those with high SES. This relationship increased with age. Efforts to improve health of African Americans should identify health-enhancing resources that would reduce SES disparities which require policy initiatives addressing components of SES that influence health.

SOURCES OF WELL-BEING FOR HEALTHY AGING

AGE IDENTITY IN CONTEXT: THE INTERSECTION OF LINKED LIVES, PERSONAL CONTROL, AND PERCEIVED TEMPORALITY

M.H. Schafer, T.P. Shippee, *Center on Aging and the Life Course, Purdue University, West Lafayette, Indiana*

The passage of time is fundamentally experienced through people's interaction with their social worlds. Life course scholars acknowledge the multiple aspects of temporality, but have given little attention to age identity in a dynamic context. We hypothesized that turbulence within people's intimate social networks would hasten the pace of subjective aging, leading to older age identities over the course of a decade. Personal control was expected to mediate this relationship. These hypotheses were tested with the Midlife Development in the United States study, a nationally-representative longitudinal survey. Regression results show that turbulence within people's social world does indeed accelerate subjective aging and that personal control is a partial mediator of this temporal flux. The findings demonstrate an interconnection between prevailing areas in social psychology (personal control and linked lives) and perceived temporality. Broadening our conception of time-based experience offers exciting directions for future theory and research in life course sociology.

THE IMPACT OF LOSS OF LOVED ONES ON LIFE SATISFACTION AMONG RESIDENTS IN A RETIREMENT COMMUNITY: THE ROLES OF SOCIAL SUPPORT

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Purpose: Declined well-being is often observed among older adults experiencing recent loss of family members or close friends. Social support, an influential factor for well-being, can be adversely affected both quantitatively and qualitatively due to such loss. This study explores the roles of social support in mediating the relationship between loss of family members or close friends and the life satisfaction in older residents living in a retirement community. Methods: Data were collected through a mail survey on a sample of 734 older residents in a retirement community in the Southwest. Participants had an average age of 67 (SD = 9.6), and 62.4% of them were females. Social support is indicated by average network size, emotional support, and satisfaction with social support. SPSS Marcos developed by Preacher and Hayes (2008) for estimating the indirect effects in multiple mediator models was adopted. Control variables include demographics, self-rated health, engagement in volunteering work and social activity participation. Results: Participants who experienced loss in life reported statistically significant lower life satisfaction scores than those who reported no loss ($p < .01$). Multiple mediator analyses found that the direct effects of life loss on perceived life satisfaction is partially mediated by emotional support ($B = -.36$, $p < .05$) and satisfaction with social support ($B = -.49$, $p < .05$), but not average network size ($B = -.04$, $p > .05$). Implications: Interventions needs to target older adults who experienced loss in life and thereby dwindling social support, through provision of supportive services that improve emotional support and satisfaction with social support.

RELIGION AS A COPING MECHANISM FOR HEALTH PROBLEMS AND DEPRESSION AMONG AGING PUERTO RICANS ON THE MAINLAND

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The connections between religiosity or spirituality and health have been documented in hundreds of empirical studies. However, very few

studies have analyzed religious experience and coping from the elder's own standpoint; and even less have addressed this question in Hispanic populations. The purpose of this study is twofold; using semi-structured ethnographic interviews in a sub-sample of 40 aging Puerto Ricans from the Boston Puerto Rican Health Study, this paper examines: 1/ the scope and phenomenology of religious experiences of older Puerto Rican-born elders on the mainland; 2/ reported functional aspects of different forms of religious coping for health and depression. Puerto Ricans in this study were conspicuous in their religious coping. There is great diversity of religious/spiritual orientations, including religious syncretism. Both internal and external aspects of religion, such as faith, the power of praying, reading of religious texts, observances, participation in religious communities and contact with religious "families" and others derive forms of social support that support well being, keep away "bad thoughts," help address particular health problems and may also help the individual realize of psychological distress, such as through the manifestation of "celajes" or premonitions.

MODELING PATHWAYS TO POSTOPERATIVE OUTCOMES IN ADULT AND OLDER CARDIAC PATIENTS: A BIOMARKER AND POSITIVE AND NEGATIVE FAITH

A.L. Ai, I. Nam, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Introduction: Heart disease (HD) is the number one killer of older Americans, while studies have shown the protection of faith in HD populations. Evidence linking depression with poor prognosis of HD, including that of open-heart surgery, has been well-established. Hostility as negative emotion/personality traits has been associated with poor prognosis and mortality in HD. This interdisciplinary, prospective study estimated major psycho-physiological pathways from preoperative distress and religiousness, to postoperative depression and hostility. Methods: Using standardized instruments, trained research assistants conducted sequential interviews before and after surgery in middle-aged and older cardiac patient. Standardized medical and surgical indices were selected from a national database (the Society of Thoracic Surgeon's Database). Plasma samples were drawn in the morning before operation to obtain the data on interleukin-6 (IL-6), a stress-related biomarker. Results: Pre-operative spiritual struggle mediated the indirect effect of both anxiety and anger coping on IL-6 immediately before operation, which was in turn associated with poor postoperative outcomes (depression and hostility). Anger and avoidant coping also mediated the influence of anxiety on postoperative maladjustment. Further, positive religious coping (R-cope) and hope played important mediating roles on parallel pathways, to counterbalance or to moderate the undesirable influences of maladaptive coping on postoperative depression. Conclusion: Maladaptive coping contributes to poor postoperative outcomes. The link between spiritual struggle and IL-6 mediated the indirect effects of negative non-religious and religious coping on postoperative hostility and depression. Should positive pathways not be presented, the deteriorating effects of preoperative distress and maladaptive coping could have been more damaging.

ON THE ROAD TO HEALTHY AGING: PILGRIMAGE AS HEALTH STRATEGY IN JAPAN

J.A. Danelly, *UWM, Milwaukee, Wisconsin*

While religious activities such as prayer and church attendance have been widely discussed among gerontologists, religious pilgrimage has been given far less attention. In contemporary Japan, older adults are the most likely age group to embark on a religious pilgrimage. This paper examines the motivations for making a pilgrimage in late life as well as the subjective accounts of its effects on health and well-being. The data for this paper is based on two years of ethnographic research comprising interviews with religious pilgrims and observations during participation in two different pilgrimages. The preliminary findings of this research suggest that pilgrimage combines physical, emotional, social and spiritual health benefits for older adults in ways that other

resources do not provide. Older pilgrims are more likely to travel as a group, often combining religious practice with leisure activities such as visits to hot springs. Many pilgrimages explicitly involve practices aimed at healing of physical as well as mental decline, with whole circuits now devoted to the prevention of late life dementia. The pilgrimage model has also been successfully utilized by community welfare groups as a way to increase older adult social activity and integration, giving evidence that this model has implications for transferring the benefits of pilgrimage to non-Japanese cultures.

SESSION 2135 (SYMPOSIUM)

THE NATIONAL HEALTH AND AGING TRENDS STUDY: A NEW RESOURCE FOR THE STUDY OF DISABILITY TRENDS AND DYNAMICS IN OLDER PEOPLE

Chair: J. Kasper, *Health Policy & Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

This symposium introduces a new national survey aimed at assembling a rich database that will allow researchers to study changes over time in independence and disability among older people, and key causes and consequences of these changes. Dissemination and broad use of the data by the research community is a major goal and through presentations such as this we plan to inform researchers about the study's aims, design, data content, and availability. This presentation also provides the research team with the opportunity to hear from the research community as the study is being developed. Individual presentations will cover the following topics: 1. Overview of the National Health and Aging Trends Study: Design, Data and Dissemination 2. Conceptualizing and Measuring Disability: Plans for the National Health and Aging Trends Study 3. Assessing Disease Histories and Chronic Disabling Conditions in the National Health and Aging Trends Study 4. Tracking the Consequences of Disability in the National Health and Aging Trends Study 5. Designing Data Linkage Systems for the National Health and Aging Trends Study

OVERVIEW OF THE NATIONAL HEALTH AND AGING TRENDS STUDY: DESIGN, DATA, AND DISSEMINATION

J. Kasper¹, V. Freedman², G. Kalton³, 1. *Health Policy & Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*, 2. *University of Medicine and Dentistry of New Jersey, New Brunswick, New Jersey*, 3. *Westat, Rockville, Maryland*

A new national study aimed at assembling a rich database that will allow researchers to study changes over time in independence and disability among older people, and key causes and consequences of these changes, is underway. The study is funded by NIA and will be led by researchers at the Johns Hopkins Bloomberg School of Public Health working in collaboration with investigators at the University of Medicine & Dentistry of New Jersey, Brown University, Columbia University, the Medical College of Wisconsin, the Urban Institute, the University of Iowa, Syracuse University, and the survey research firm, Westat. The study consortium is designing comprehensive state-of-the-art methods for measuring disability in older people and will obtain information on key economic and social consequences of disability. This presentation will review the study aims, design, timeline and dissemination plans.

CONCEPTUALIZING AND MEASURING DISABILITY IN THE NATIONAL HEALTH AND AGING TRENDS STUDY

E. Agree, V. Freedman, L.P. Fried, B. Spillman, *Population, Family, and Reproductive Health, Johns Hopkins University, Baltimore, Maryland*

Disability measures in NHATS will support analyses in several areas: 1) understanding the relative contributions of shifts in physiologic, socioeconomic, environmental, behavioral, and medical factors to trends in disability; 2) investigations into which combinations of these factors

lead to different disability pathways at the individual level and how and why pathways differ for less advantaged groups; and 3) comprehensive modeling of outcomes of the disablement process. Information will be collected to disentangle the components of disability: an individual's underlying capacity to carry out basic tasks; the ability to carry out basic tasks independently, and the extent of engagement in tasks and valued activities. Measures will include the physical, social, and technological environment, and accommodations that individuals make in response to disability (e.g. use of assistive technology, environmental modifications, assistance from others, behavior change).

TRACKING THE CONSEQUENCES OF DISABILITY IN THE NATIONAL HEALTH AND AGING TRENDS STUDY

L.E. Pezzin, *Medical College of Wisconsin, Milwaukee, Wisconsin*

Disability and chronic disease have profound consequences for older individuals, their families and society. Providing data to better understand these consequences and track how they develop as functional decline progresses is one of the central aims of the NHATS. This presentation describes plans for measures of outcomes of functional decline in several domains: living and long term care arrangements, financial consequences of disability-related costs for individuals, families, public programs, economic wellbeing, and quality of life. Unique contributions will be the ability to track functional decline and its consequences from very early stages, to examine how individuals and families choose to respond and what influences responses, and to observe the implications of different responses for outcomes. These outcomes and their measurement will be examined in the broader conceptual framework of the disablement process central to the NHATS.

DESIGNING DATA LINKAGE SYSTEMS FOR THE NATIONAL HEALTH AND AGING TRENDS STUDY

V. Mor, *Community Health, Brown University, Providence, Rhode Island*

This new survey is one of the first national data sets being designed with explicit personal and geographical data linkage in mind from the outset, since these contextual factors are increasingly recognized as highly influential in shaping elders' response to the disablement process. Linkages are planned to: 1) Medicare enrollment records and all Part A (institutional), Part B (physician) and Part D (drug) claims, and 2) information about providers based on the Medicare Provider of Service files and other sources (e.g. information available about provider quality of care from external sources). Geo-coding a respondent's address provides for measures of distance from health care providers as well as characteristics of census blocks, zip codes and/or counties. Both restricted files that allow users access to linked data using established data security protocols for data use agreements and public use files which give users access to summary data are planned.

ASSESSING DISEASE HISTORIES AND CHRONIC DISABLING CONDITIONS IN THE NATIONAL HEALTH AND AGING TRENDS STUDY

R. Wallace, *Epidemiology, University of Iowa College of Public Health, Iowa City, Iowa*

Chronic diseases and conditions underlie much disability in older people and, as a result, are an important area for evaluation in NHATS. Information on chronic disease prevalence (and incidence) will be obtained from self-report as well as diagnostic information from linked claims data. We also plan to draw on CMS's Chronic Condition Warehouse indicators for major chronic conditions. Data on treatment related to chronic conditions will be collected including temporal patterns of clinical events, extent and intensity of medical care (including hospitalization), symptom profiles, prescription drug use, and self-management of chronic conditions. An equally important focus for data collection is clinical syndromes. These will be explored for temporality, extent of self-management and functional impact. Questions will be

included on emerging concepts such as geriatric frailty, and events such as falls, as precursors to disability.

SESSION 2140 (SYMPOSIUM)

THEORETICALLY DERIVED MODELS FOR COMMUNITY-BASED INTERVENTIONS DESIGNED TO IMPROVE NUTRITION-RELATED OUTCOMES IN OLDER ADULTS

Chair: J.L. Locher, *Medicine/Health Care Organization and Policy, University of Alabama at Birmingham, Birmingham, Alabama*
Discussant: J. Sharkey, *Texas A & M, College Station, Texas*

Reliance upon theory is critical in planning and developing effective community-based interventions, including those designed to improve nutrition-related outcomes in older adults. This symposium presents four projects that relied upon different theoretical perspectives. The first paper reports on a faith-based initiative designed to recruit volunteers to deliver meals to homebound older adults who were socially isolated in an underserved inner-city neighborhood. The project relied upon social capital and social network theory and was supported by the Lucille Beeson Foundation. The second paper reports on a telephone intervention designed to increase consumption of calcium and vitamin D in community-dwelling older adults who are at high-risk for experiencing osteoporotic fracture. The project uses social cognitive theory and is supported by the Agency for Healthcare Research and Quality. The third paper reports on a self-management intervention designed to improve nutritional intake in older adults receiving Medicare home health services and who are at especially high risk for experiencing under-nutrition. This project uses an ecological perspective and is supported by the National Institute on Aging. The fourth paper reports on a train-the-trainer intervention for lay leaders to teach family members of persons with dementia to alter mealtimes. This project used a self-efficacy framework and was supported by the South Carolina Nutrition Research Consortium. As major funding agencies are encouraging translational initiatives that link scientific research with public and private organizations in efforts to improve the health and well-being of community members, this symposium is relevant for anyone planning a theoretically informed community-based project.

A FAITH-BASED INITIATIVE TO RECRUIT VOLUNTEERS FOR A HOME-DELIVERED MEALS PROGRAM SERVING HOMEBOUND OLDER ADULTS: A THEORETICALLY DERIVED MODEL

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Government subsidized home-delivered nutrition programs, frequently called Meals on Wheels (MOW), seek to ensure that homebound older adults have nutritious meals regularly delivered by employees and volunteers. Long waiting lists exist in some places due to volunteer shortages. In one urban neighborhood, a community-based project rooted in social capital (SC) and social network (SN) theory was designed to increase volunteers for MOW. A Support Team model was used, solidifying pre-existing "bonding" SC among religious congregations in the neighborhood and SNs within those congregations, and building "bridging" SC to a local MOW program. Six congregations of different denominations staffed one volunteer route serving > 2000 meals to sixteen new clients in its year of inception, and the route is still in its existence. Further, the model has since been replicated. This program's successful

implementation, continuation, and replication demonstrate that theory is critical in developing effective community-based interventions.

USING THEORY BASED, TAILORED, WRITTEN MAILED MATERIALS TO INCREASE CALCIUM AND VITAMIN D INTAKE IN OLDER COMMUNITY-DWELLING ADULTS WITH HIGH FRACTURE RISK

B. Kitchin, J. Curtis, C. Kohler, *University of Alabama at Birmingham, Birmingham, Alabama*

Aging is a major risk factor for osteoporosis and subsequent fragility fractures. Fragility fractures in the elderly incur high personal and medical costs. However, many older people lack osteoporosis and fracture risk knowledge, awareness, skills, and self-efficacy necessary to engage in bone protective behaviors such as adequate calcium and vitamin D intake. In this study, the researchers will examine the efficacy of tailored printed materials in a magazine format in increasing calcium and vitamin D intakes in community dwelling older adults at high risk for fragility fractures. Participants will be randomized to a usual care group and an intervention group that will receive the tailored print materials by mail. The education materials will be tailored according to participant responses to a baseline survey based on the osteoporosis health belief model and self-efficacy theory. Outcome variables measured will include calcium and vitamin D intake after the 6 month intervention period.

USE OF AN ECOLOGICAL PERSPECTIVE IN AN INTERVENTION TO IMPROVE NUTRITIONAL WELL-BEING OF OLDER ADULTS RECEIVING HOME HEALTH SERVICES

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The overall purpose of the study described in this paper is to evaluate the efficacy of a multi-level self-management intervention to improve nutritional intake in a group of homebound older adults who are at high risk for under-nutrition. The study is guided by the theoretical approaches of the Ecological Model and Social Cognitive Theory and uses a prospective randomized controlled design to estimate whether individually tailored counseling focusing on social, environmental, and behavioral aspects of eating results in increased caloric intake and improved nutrition-related health outcomes. This presentation focuses on the use of the Ecological Perspective to promote healthy eating behavior. Consistent with the Ecological Perspective, we describe the preliminary work that was conducted in order to identify the multiple levels of influence that effect eating behavior (including: intrapersonal/individual factors, interpersonal factors, institutional/organizational factors, community factors, and public policy factors) and how these were used to design the intervention.

SELF-EFFICACY FOR CHANGE IN A MEALTIME TRAIN-THE-TRAINER PROGRAM

E. Amella¹, S.B. Laditka², 1. *College of Nursing, Medical University of South Carolina, Charleston, South Carolina*, 2. *University of North Carolina at Charlotte, Charlotte, North Carolina*

Families of persons with dementia have a lifetime of experience sharing meals; tapping that knowledge to create a mealtime plan that allows for change related to dementia, particularly the need for assistance, managing disruptive behaviors and inadequate intake, was the underlying purpose of this project. As part of developing a comprehensive mealtime intervention, a train-the-trainer program for staff and caregivers of persons attending support groups and adult daycare was based on change theory – the Self-Efficacy component of Social Cognitive Theory. Caregiver's and trainer's self-efficacy for making mealtime changes was altered using the principles of learning from others (vicariously),

and sharing how newly acquired skills resulted in positive changes. Social persuasion was strong in these settings as trainers and caregivers tried hard to succeed and supported and received support for emotionally and physically challenging mealtimes. In this pilot study, mastery facilitated self-efficacy and adoption of new caregiving behaviors at mealtimes.

SESSION 2145 (SYMPOSIUM)

AN INTERPROFESSIONAL COURSE ON IMPROVING CARE TRANSITIONS: IMPLEMENTATION & LESSONS LEARNED

Chair: *E.S. McConnell, School of Nursing, Duke University, Durham, North Carolina, Durham VA GRECC, Durham, North Carolina*

Discussant: *D.S. O'Leary, The Joint Commission, Chicago, Illinois*

Managing transitions in care effectively requires interprofessional collaboration. Currently, health professions students lack opportunities to develop interprofessional competencies called for by the emerging evidence-base for improving care transitions. National attention directed toward improving the quality of care transition processes make care transitions an ideal focus for interprofessional coursework delivered using authentic, project-based cooperative learning techniques. Our semester-long course for advanced, pre-licensure students from medicine, nursing, pharmacy, physical therapy, and a physician's assistant program successfully met the IOM mandate for improving interprofessional learning regarding important geriatric care issues. Core elements of the course included an interprofessional faculty team, project-based learning, and use of active learning strategies. The objective of this session is to discuss course design, implementation and evaluation strategies for interprofessional learning that is focused on improving geriatric care. The session offers: (1) an overview of course development and implementation; (2) our approach to building students' quality improvement expertise to facilitate their ability to engage in project-based learning; (3) our experiences helping faculty develop needed skills and confidence in active learning techniques to support students' abilities to propose realistic solutions to problems elderly patients face in transition, and (4) a detailed description of teaching about problems in transitions using an active-learning approach. Our evaluation demonstrates significant improvements among both faculty and students on their self-efficacy for the majority of the core content. Individual sessions showcase practical solutions to managing challenges of interprofessional teaching around transitions in care. The discussion focuses on implications of training model for improving geriatric care.

IMPROVING QUALITY IN TRANSITIONS OF CARE FOR OLDER ADULTS: OVERVIEW OF AN INTERPROFESSIONAL COURSE FOR ADVANCED LEARNERS

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A semester-long course for advanced pre-licensure health professions students aimed to enhance knowledge of care delivery across transitions and strengthen geriatric teamwork and quality improvement skills. Faculty teams facilitated seven interactive sessions on teamwork, transitions, communication and quality improvement (QI) for 12 students from 5 disciplines. Between sessions, students conducted patient and stakeholder interviews, performed chart reviews, observed team meetings, and worked as teams on QI projects. Learning was assessed using a mixed-method approach—pre-post self-efficacy, assignment completion, project evaluation, and student survey and focus group feedback. Students' reported high satisfaction, especially with active interprofessional (IP) learning. Self-efficacy increased significantly on 3 topics (quality improvement, transitions in care, and cultural compe-

tence) and marginally on IP care. Student teams presented QI proposals to faculty and health system leaders. This course enhanced relevant knowledge and skills in QI methodologies, cultural sensitivity, care transitions, and IP care.

BUILDING QUALITY IMPROVEMENT EXPERTISE THROUGH PROJECT-BASED LEARNING

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Through interactive lectures and project-based assignments, we challenged interprofessional students to improve transitions in care for older adults. Students applied quality improvement (QI) methods to a current clinical issue: readmissions for elderly patients with heart failure (HF). To gain experience with care processes and variations in delivery, students conducted chart reviews, interviewed patients and stakeholders, and observed healthcare team meetings. Students selected a specific transition problem in patients with HF, used data to assess the outcomes of care, dissected the problem and identified contributing factors. Students reviewed literature and designed an evidence-based intervention with input from stakeholders. Students applied improvement principles to develop data collection plans and design and test changes. Upon project completion, teams presented findings to key stakeholders, who posed questions and provided recommendations regarding feasibility of implementation and strategies for overcoming resistance to change. On pre-post survey, student self-efficacy improved with respect to quality improvement methods ($p < .001$).

A LEARNER-CENTERED APPROACH TO INTERPROFESSIONAL INSTRUCTION: COURSE REFLECTIONS AND PRACTICAL APPLICATIONS

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Evidence from educational research supports use of authentic, active learning strategies, however, many faculty only have experience using more traditional, passive teaching approaches. In order to ensure faculty and student success in a course involving authentic, project-based learning, we implemented a systematic strategy for developing faculty skills in active learning techniques. Approaches included: (1) interactive faculty development sessions, (2) use of interprofessional teaching teams, (3) consultation with instructional design experts during lesson plan development (4) post-session faculty reflection, and (5) faculty facilitated project-based, small group work. Systematic evaluation showed increases in faculty self-efficacy in actively teaching interprofessional core competencies. This session examines the synergistic collaboration of an interprofessional teaching team and instructional design experts to deliver an authentic, project-based curriculum. We will share our experiences helping faculty develop needed skills and confidence in active learning techniques to support students' abilities to propose realistic solutions to problems elderly patients face in transition.

PROBLEMS IN TRANSITIONS OF CARE: A COURSE SESSION EXEMPLAR

V. Scott, M. Heflin, C.C. Hendrix, S.O. Pinheiro, S.N. Hastings, *Community and Family Medicine, Duke University, Durham, North Carolina*

As part of an interprofessional course for advanced learners at Duke University, we designed a learner-centered session focusing on problems in transitions of care. We employed an interactive teaching approach to engage learners and promote active learning. Session objectives included: 1) identify patients at risk of complicated transitions, 2) describe common problems occurring during transitions and, 3) discuss the benefits of medication reconciliation. Teaching strategies included showing a video clip of a real patient transition followed by a group discussion of elements contributing to a good transition. We also included

brief mini-lectures emphasizing common problems in care transitions and risk factors for complicated transitions. Finally, learners participated in a small group exercise simulating medication reconciliation from the patient perspective. In follow-up, learners conducted interviews and chart reviews of older patients recently involved in care transitions. We describe the medication exercise in detail and discuss outcomes for this teaching module.

SESSION 2150 (PAPER)

ATTITUDES ABOUT AGING AND GERIATRIC ASSESSMENT

“WE HAVE TO CREATE FAMILY”: A CASE STUDY OF LESBIAN ELDERS ILLUSTRATING SUPPORT ISSUES AND NEEDS FOR AGING

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There are striking differences between homosexual and heterosexual elders in terms of support needs for aging. Lesbian and gay elders are more likely to age single, live alone, and have no children to call upon in times of need as compared to their heterosexual counterparts. For lesbian and gay elders this potentially means a disparity in natural supports. There is a growing consensus regarding the importance of social ties on older adult well-being. Limited social support has been associated with a variety of health disparities. Lesbian elders are among the most invisible of all Americans and experience a triple minority status (age, gender, sexual orientation) that renders them marginalized. The purpose of this study is to increase visibility, awareness and understanding of elder lesbians. To date, there has been an inadequate amount of research devoted to the aging and health experiences of lesbian elders and the factors that impact those experiences. Continued lack of knowledge may potentially undermine optimal care delivery for this vulnerable population. An instrumental collective case study of four lesbian elders (aged 55 and older) illustrating support issues and needs for aging is discussed. Findings suggest that lack of biological family support, childlessness, and experiences of support within informal lesbian social networks significantly impact care expectations and decisions. Implications for health professionals in working with elder lesbians include exploring existing support systems as well as exploring and assisting with the formation of culturally acceptable support systems and services.

SILENT AGEISM: HOW HEALTH CARE WORKERS PERPETUATE NEGATIVE ATTITUDES AND STEREOTYPES

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Introduction: Ageism refers to the stereotyping of and discrimination against individuals or groups because of their age. Ageism often goes undetected or unchallenged within health care. Objective: This study examines the perceptions of gerontological occupational therapists and their experiences with ageism within their work settings. The audience will understand the concepts of ageism and learn to recognize its occurrence within the health care system and learn strategies to prevent ageism. Methods: This interpretive inquiry study used in-depth semi-structured interviews with 16 occupational therapists working with older adults in various work settings to examine their experiences with ageism in these settings. Analysis of transcripts and written responses were subjected to constant comparative analysis. Results: This study revealed that there remains covert discrimination towards older adults, the health professionals with whom they work, and the organizational structures related to this population. Health professionals appeared to be agents of ageism - reflecting societal expectations and reinforcing stereotypical tendencies that were already present in society. The social impact of ageism will be discussed including discrepancies in service allocation. Findings from this study along with techniques provided on

how to confront this challenge can be used to inform clinical practice as well as encourage personal and professional reflections. Examples and case studies will be presented. Conclusions: Acknowledgement of the presence of ageism within our work setting is the first step towards providing optimal care for older adults with complex and ongoing medical needs and ensuring that ageist beliefs and attitudes are addressed.

DEVELOPMENT OF A CAREPARTNER COMPREHENSIVE GERIATRIC ASSESSMENT

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Introduction: A reliable instrument to assess health status is needed to improve acute care for vulnerable older adults. A Frailty Index derived from Comprehensive Geriatric Assessment (FI-CGA) discriminates between levels of fitness and frailty and predicts relevant outcomes. Information, particularly regarding prior levels of function, may be difficult to obtain from older people. Carepartners or relatives may be in a unique position to provide this important information. Our objective was to develop a CGA form for completion by carepartners. Methods: The carepartner survey (R-CGA) was based upon a single page CGA. The organization and content of the questionnaire were reviewed and revised by members of the multidisciplinary team. A convenience sample (n= 100) of older patients (age ≥ 70 years) presenting to Emergency Medical Services (EMS) and the Geriatric Medicine Ambulatory Care Clinic will be enrolled. The primary outcomes include time-to-complete, percent completeness and its agreement with other frailty indexes (FI-CGA). Results: The carepartner survey was developed over a six month period. It collects social, medical and functional information about the subject. In a pilot study (n=24), the protocol seemed feasible and R-CGA completion rates were high (90.1%). The mean age was 80.6 ± 5.2 years and 62% (15) of subjects were female. The time to complete was 11.6 ± 4.1 minutes (n=12). Conclusions: We have aggregated best evidence from geriatric and emergency medicine to develop a standardized tool to assess health status. The R-CGA may be a feasible, valid and efficient means of capturing important information about vulnerable older patients.

IS A COMMUNITY-BASED SELF-REPORT TOOL A VALID AND RESPONSIVE MEASURE IN FACILITY-DWELLING SETTINGS?

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Objective: Evaluate the psychometric properties of the Late-Life Function and Disability Instrument (LLFDI) in an elderly, facility-dwelling population. Design: Retrospective cohort. Participants: 469 cognitively intact subjects from the “Promoting Independence in Residential Care” randomized controlled trial. Interventions: Not applicable. Main Outcome Measures: Reliability, concurrent validity, effect size (ES), standardized response mean (SRM), standard error of measure (SEM), and minimal detectable change (MDC90) of the LLFDI Function, Disability-Limitation and Disability-Frequency summary scales in association and comparison with a performance-based measure, the Elderly Mobility Scale (EMS) and components of a health index measure, the EuroQol (EQ-5D). Results: The 3 LLFDI summary scales demonstrated good internal consistency ($\alpha = .74 - .95$). Concurrent validity was supported for the Function and Disability summary scales, with the EMS and EQ-5D ($r = .73$ to $.43$, $p < .0001$). Distribution-based statistics revealed comparable or larger effect sizes for the LLFDI scales compared to the EMS and EQ-5D. Percentage of subjects exceeding a minimal change threshold was comparable or larger for the LLFDI Function scale than the comparison function measures and larger for the Disability-Limitation scale than the comparison disability measures. Conclusions: Reliability and validity of the LLFDI summary scales were

supported in this cognitively intact facility-dwelling population. The Function and Disability-Limitation scales demonstrated a larger degree of responsiveness than the EMS and EQ-5D measures. Performance of the Disability-Frequency scale was questionable in this population. Key Words: Psychometric properties, Function, Disability

EXPANDING NURSES ASSESSMENT OF OLDER ADULTS: SUCCESS OF THE HOW TO TRY THIS SERIES

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Care for older adults requires population specific assessment skills. Assessment is the hallmark of care to older adults. The Hartford Institute for Geriatric Nursing Try This™ assessment series has been highly successful in identifying valid and reliable assessment instruments and best practice approaches for the practicing nurse, faculty and nursing students. In 2007, the American Journal of Nursing (AJN) and the Hartford Institute developed "How to Try This," a video and print series to demonstrate how to apply 30 of the Try This™ instruments in the clinical practice setting. The 30 How to Try This videos were created using real patients and nurses in a typical hospital setting. All videos were free on the AJN web site. We report here on the use of the How to Try This™ series. Specifically using aggregated data collected from registered users of the AJN Web site (www.NursingCenter.com/AJNolderadults), we report on the access of the video series by 7,000+ RNs and other health care professionals. Specifically, we report data as to registered users relative popularity of assessment instruments, typical time spent on each assessment video, and user characteristics. We also report on closed and open ended responses to a mailed survey of 1000 randomly selected subscribers to AJN (response rate 30%) and responses of baccalaureate nursing faculty participating in the Geriatric Nursing Education Consortium (GNEC) project. Applicability of the findings to nursing education and practice will be discussed. Funding for this project provided by the John A. Hartford Foundation.

SESSION 2155 (PAPER)

DISPARITIES

MULTIPLE HOSPITALIZATIONS OF OLDER DIABETES PATIENTS: DO DISPARITIES EXIST?

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The purpose of this population-based study was to examine the extent and costs of multiple hospitalizations in older diabetes patients and their relationships with sociodemographic and clinical characteristics of patients. We analyzed California's state inpatient data, which included 199,990 older diabetes patients who were discharged from acute care hospitals in 2006. About 32.6% of patients were hospitalized more than once during the year, accounting for about 57.1% of total hospitalizations. The average length of stay was slightly longer for patients with multiple stays (6.1 days) than for patients with single stays (5.2 days). The average total cost was almost three times larger for patients with multiple stays (\$52,033.4) than those with single stays (\$18,094.9). Multiple hospitalizations were more likely to occur in ethnic/racial minority groups, people with Medicaid as primary payer, and people with lower median income. The most common principal diagnosis for the first hospital stay of patients with multiple stays was congestive heart failure (9.3%) followed by pneumonia (5.9%). Congestive heart failure is also the most common principal diagnosis category for subsequent hospital stays (10.4%) followed by septicemia (6.3%). On average, patients with multiple stays had four chronic conditions. The study find-

ings suggest that multiple hospitalizations in older diabetes patients are common, expensive, and more likely to be experienced by low-income ethnic minority populations. Innovative chronic care delivery models to reduce multiple hospitalizations in this population should be developed and evaluated.

REGIONAL DISPARITIES IN INCIDENT COGNITIVE DECLINE: THE REGARDS STUDY

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Because there are shared risk factors for stroke and cognitive impairment, we aimed to determine in a national cohort whether incident cognitive impairment is greater in the Stroke Belt region (8 southern states with elevated stroke mortality) than in the remaining United States. Stroke risk factors were assessed in the REasons for Geographic And Racial Differences in Stroke (REGARDS) study via in-home and telephone methods. Global cognitive status was assessed annually by telephone with the Six-item Screener (SIS). We included REGARDS participants who were cognitively intact at enrollment (SIS > 4 of 6), reported no prior stroke or TIA, and had 2+ cognitive assessments. The resulting sample consisted of 18,781 participants: mean age 65 (± 9 years), 57% women, 37% African American, 55% residing in the Stroke Belt and 45% in the remaining 40 contiguous states. Logistic regression examined the association of region of residence with incident cognitive impairment (SIS score ≤ 4) among participants with a first SIS score > 4. Odds ratios were adjusted for age, race, gender, education, and time between first and last assessments (mean interval 2.0 ± 0.8 years). Overall, 1,600 participants (8.5%) declined to an SIS score ≤ 4. Residents of the Stroke Belt region had greater adjusted odds of incident cognitive impairment than non-Belt residents (OR = 1.20; 95% CI 1.08 - 1.34). All demographic factors and time independently predicted impairment. Factors influencing geographic disparities in stroke mortality may also influence disparities in cognitive decline, suggesting shared environmental risk factors.

PSYCHOTROPIC MEDICATION KNOWLEDGE: DIFFERENCES BY RACE/ETHNICITY AND AGE

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Reasons for racial/ethnic differences in psychotropic use among older adults are unclear. We examined differences in psychotropic knowledge among older adults with the Collaborative Psychiatric Epidemiology Surveys, nationally representative surveys of mental illness and treatment that oversampled racial/ethnic minority populations. Respondents were asked about past-year psychotropic use in two ways: acquiescence to broad categories of psychotropics (antidepressants, sedatives, tranquilizers), and identification by name. Logistic regression in SUDAAN measured relationships among concordance between medication reports and race (Non-Latino White, African-American/Afro-Caribbean, Latino, and Asian), mental illness, physical illness, sociodemographics, cognitive status, number of psychotropics, and past-year mental health services (MHS). Among adults ≥65 naming particular antidepressants (N=134), African Americans/Afro-Caribbeans and Latinos were less likely than Whites to acquiesce to the antidepressants category (Odds Ratio[OR]=0.03, 95% Confidence Interval[CI]=[0.00, 0.76]; OR=0.11, CI =[0.02, 0.72]), respectively). Specialist MHS were associated with high concordance. Among adults <65 naming antidepressants (N=1069), African Americans/Afro-Caribbeans were less likely than Whites to acquiesce to the antidepressant category (OR=0.55, CI=[0.30, 0.99]). Among younger respondents, concordance increased with mental ill-

ness and primary care MHS. Everyone naming particular tranquilizers (317 younger, 70 older adults) had complete concordance. Among younger adults naming particular sedatives (N=230), concordance was higher among Latinos than Whites and among those with more education. Only 49 older adults named sedatives, precluding further analysis. Results indicate that racial/ethnic disparities exist in identification of medication purpose, and these disparities differ by age and medication class. This study identifies populations who may benefit from increased medication education, as understanding medication purpose impacts adherence.

PATTERNS OF DISPARITIES IN DIABETES DIAGNOSIS AND GLYCEMIC CONTROL IN OLDER ADULTS

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Younger age, minority ethnicity, and lower socioeconomic status (SES) are risk factors for sub-optimal glycemic control in older adults with diagnosed diabetes. However, the pattern of disparities in older adults with undiagnosed diabetes is not completely known. We hypothesized that younger age, minority ethnicity, and lower SES are also associated with the lack of a diabetes diagnosis in older adults. We performed secondary data analysis of wave 2006 of the Health and Retirement Study, a national health interview survey of older adults. The analysis was limited to respondents 53 years and older who submitted blood samples for HbA1c measurement (n=6,064). We used HbA1c $\geq 7\%$ to define sub-optimal glycemic control in those respondents reporting a diabetes diagnosis. Likewise, we used HbA1c $\geq 7\%$ to define undiagnosed diabetes in those respondents reporting no diabetes diagnosis. Socio-demographic covariates included age, gender, race, and SES. We performed bivariate analyses of association of socio-demographic covariates with self-reported diabetes and measured HbA1c levels. 1,273 respondents reported having diabetes; 29% had HbA1c $\geq 7\%$. 4,791 respondents reported not having diabetes; 1% had HbA1c $\geq 7\%$. Younger age, male gender, African-American ethnicity, and lower SES were associated with elevated HbA1c in respondents with diabetes diagnoses ($P < 0.05$). In contrast, only lower SES was associated with elevated HbA1c in respondents without a diabetes diagnosis ($P < 0.05$). Contrary to our hypothesis, a different socio-demographic disparity pattern underlies older adults lacking a diabetes diagnosis as opposed to those with diabetes and poor glycemic control. Lower SES is a common risk factor and potential target for intervention.

SESSION 2160 (PAPER)

MENTAL HEALTH - HS PAPER SESSION

UNDERSTANDING OLDER ADULTS WITH SCHIZOPHRENIA: BUILDING AND ERODING TRUST

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Introduction: Adults who struggle with schizophrenia are living longer. At the same time, data suggest that older adults living with schizophrenia face health care disparities that contribute to poor physical health. The purpose of this poster is to present findings from a qualitative study that explored the understanding of physical health among older adults with schizophrenia. In gathering the individual perspective, one of the study goals was to understand factors that might influence experienced health care disparities. **Methods:** A grounded theory study was conducted among 28 older adults with schizophrenia living in a variety of settings using semi-structured interviews and participant observation. **Results:** The concept of trust evolved from the data as a dynamic process that was built with dimensions of respect, caring, advocacy, and

consistency and eroded through dimensions of disrespect, not being heard, lack of time and provider inaction, and stigmatization. This process of building and eroding trust was influenced by the symptoms of schizophrenia. **Conclusions:** The fluctuating and chronic nature of schizophrenia, the societal response to the disease, and the fragmented health care system all impact trust. When trust is given and received between providers, the health care system, and the older adult with schizophrenia, physical health outcomes may improve and health care disparities may decline. These findings provide insights for the design of future research interventions and clinical practice to promote optimal physical health outcomes for this growing population.

12-MONTH DIAGNOSED PREVALENCE OF BEHAVIORAL HEALTH DISORDERS IN MEDICARE AND MEDICAID MEMBERS

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The anticipated increase in the number of elders with behavioral health disorders (BHDs) poses serious challenges to the health care system. Nevertheless, prevalence of BHDs in elders has not been well studied. We used merged Massachusetts Medicare and Medicaid claims (CY2005) to examine 12-month diagnosed prevalence of BHDs and chronic physical conditions by insurance coverage (Dual Eligibles, Medicare Only, and Medicaid Only) and age (55 to 64, 65 and over). BHD-groups included Severe Mental Illness, Other Mental Illness, and Substance Use Disorders. Chronic physical conditions included 15 major conditions prevalent among elders. Almost 170,000 (20.8%) Massachusetts Medicare and Medicaid members aged 55 and over had one or more BHDs. The most common BHDs by group were major depression (SMI), other depression (OMI), and alcohol abuse or dependence (SUD). Dual Eligibles had the highest diagnosed prevalence of BHDs and physical comorbidities. Among Dual Eligibles aged 55 to 64, the BHD prevalence (51.7%) was 4 times higher than Medicare Only; for aged 65 and over, it was 2.5 times higher (38.8% vs. 16.1%). A much higher proportion of people with BHDs had 5 or more chronic physical conditions than those without BHDs. Among Dual Eligibles, the proportions were 20.8% vs. 13.0% in aged 55 to 64 and 49.2% vs. 23.3% in aged 65 and over. The level of complexity in treatment and care coordination is higher among elders with BHDs than for those without BHDs. Interventions that effectively integrate care for physical and behavioral health disorders are increasingly important as people age.

PHARMACOLOGIC AND NONPHARMACOLOGIC INTERVENTIONS USED IN GEROPSYCHIATRIC UNITS: A PILOT STUDY

P. Lindsey, *Illinois State University, Normal, Illinois*

A paucity of research has examined how psychiatric nurses manage behavior with elderly patients hospitalized in geropsychiatric settings. The purpose of this pilot study was to examine the pharmacologic and nonpharmacologic interventions that nurses use in the management of behavioral symptoms exhibited by older adults, hospitalized on two acute care geropsychiatric units. A retrospective chart review of 108 patient records (Site A: 52 charts; Site B: 56 charts) sampled from a 3 month period identified the documented use of pharmacologic (scheduled and p.r.n) and nonpharmacologic interventions to manage behavior. Data was analyzed using descriptive statistics. Rates of p.r.n. psychotropic medications were 67.3% ($x=7.3\%$ per patient) at Site A and 75% ($x=8.3\%$ per patient) at Site B. Documentation regarding p.r.n medications differed between the two sites, including the reason for administering p.r.n medications, response to p.r.n. medications, and alternative interventions that were attempted. A lack of documentation of nonpharmacologic interventions used per patient was prevalent at both sites (Site A: 69%; Site B: 62.5%). Differences and similarities in types of diagnoses as well as the types of and patterns of administration of medications will

be discussed. Further research is needed to better understand how nurses manage behavior in geropsychiatric settings. This research will benefit the care of older adults in acute geropsychiatric settings but can also be used as a basis for clinicians treating older adults with psychiatric disturbances living in independent or supervised settings.

PSYCHIATRIC COMORBIDITY AND REHOSPITALIZATION, MORTALITY, AND FUNCTION IN STROKE PATIENTS

A. Dossa^{1,2}, D. Berlowitz^{1,2}, S. Loveland^{1,2}, H. Hoenig³, *1. Center for Health Quality, Outcomes, and Economic Research, Bedford VA, Bedford, Massachusetts, 2. Boston University, Boston, Massachusetts, 3. Durham VA, Durham, North Carolina*

We used the 2001 VA Integrated Stroke Outcomes Database to examine associations between psychiatric comorbidities and important clinical and functional outcomes in 2545 stroke patients who received inpatient rehabilitation. We defined psychiatric comorbidity as having any mental health or substance abuse diagnosis. Outcome variables included 3 and 6-month mortality post-discharge, 3 and 6-month rehospitalization post-discharge, and functional change post inpatient rehabilitation. Our logistic and linear models examined associations between the presence of outcomes and: psychiatric comorbidity; any mental health diagnoses or substance abuse; and depression, psychosis, anxiety, as independent variables. Covariates included the Charlson index, demographics, discharge setting, length of stay, rehabilitation setting, and admission functional status. Having any psychiatric comorbidity predicted 6-month rehospitalization (OR: 1.25, $p = .04$). Having any mental health diagnosis was significantly associated with 6-month rehospitalization (OR: 1.09, $p = .04$) but substance abuse was not significant. Depression was significantly associated with 6-month rehospitalization (OR: 1.47, $p = .005$). Anxiety was significantly associated with 3 and 6-month mortality (OR: 2.12, $p = .02$; OR: 2.37, $p = .001$). Since rehospitalizations can impact function, quality of life, and cost of care, we need to continue working on successful interventions to address psychiatric comorbidity in this population. We did not see associations between psychiatric diagnoses and functional change possibly because rehabilitation programs may not accept patients with severe behavioral issues. Further research is needed on the impact of psychiatric comorbidity on: a) longer term follow-up of function post-rehabilitation and b) older veterans with different diagnoses and high disability risk.

SESSION 2165 (SYMPOSIUM)

NOVEL PHENOTYPE DEVELOPMENT IN A CHANGING GENETIC STUDY LANDSCAPE

Chair: J.D. Walston, *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*

Discussant: A.B. Newman, *University of Pittsburgh, Pittsburgh, Pennsylvania*

A revolution in high through-put genotyping over the past decade has brought genome wide screening technologies, dense SNP genotyping, and resequencing candidate genes to the forefront in the search for meaningful genetic variation. Large numbers of genotypes are now widely available in population studies of older adults, but many aging cohort studies lack precise phenotype measurements that can help capture biologically meaningful genetic variation. As part of an ongoing effort to detect meaningful genetic variants that influence late life biology, endophenotypes and longitudinal trajectories related to cognitive and physical decline, frailty and longevity are actively being developed. The objective of this symposium is to first provide an overview of the theory and methodology used to advance the ongoing cross-sectional and longitudinal phenotype development efforts in aging cohort studies and in the Johns Hopkins Older Americans Independence Center genetics core. These methods will be described in detail and specific phenotype development projects from prospective aging cohort

studies will be presented, including the use of longitudinal muscle strength measures to develop muscle endophenotypes and the use of principal components analysis to develop cognitive and longevity phenotypes. The discussion will center on future directions in aging, physiological, and chronic disease phenotype development efforts, and on specific examples of successful research consortiums that have enabled the development and application of novel, age-related phenotypes across cohort studies. In addition, the increasing usefulness of these phenotypes in the detection of meaningful genetic signals in aging cohorts will be discussed.

ENDOPHENOTYPES ACROSS PHYSIOLOGIC DOMAINS HAVE HIGH HERITABILITY IN THE LONG LIFE FAMILY STUDY

A. Matteini¹, D. Fallin¹, C.M. Kammerer², N. Schupf³, R. Mayeux³, A.B. Newman², E. Hadley⁴, J.D. Walston¹, *1. Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland, 2. University of Pittsburgh, Pittsburgh, Pennsylvania, 3. Columbia University, New York, New York, 4. National Institute on Aging, Bethesda, Maryland*

The Long Life Family Study was developed to identify phenotypic and genotypic variation that correlates with long and healthy life. Thirty-two physiologic measurements from five trait domains (Cardiovascular, Cognition, Physical Function, Pulmonary, Metabolic) were used in a Principle Components Analysis (PCA) to develop component-derived endophenotypes of long and health life. Heritabilities of these endophenotypes were estimated. Overall, endophenotypes defined by variables across multiple domains showed higher heritability than those defined by a single domain. The first PC, consisting of measures of pulmonary and physical function, represented 14.5% of the total variance with an estimated heritability of 32%. The second PC consisted of measures of metabolic, cardiovascular and cognitive function and represented 12.1% of the variance with 43% heritability. The third and fourth components demonstrated low heritability and included cardiovascular and cognitive measures, respectively. These PCA-derived traits across multiple domains may help to identify underlying genetic mechanisms that drive functional longevity.

USING LONGITUDINAL DATA TO DEVELOP AGING PHENOTYPES

Q. Xue¹, B.A. Beamer², J.D. Walston¹, *1. Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland, 2. University of Maryland School of Medicine, Baltimore, Maryland*

The identification of trajectories of change over time has been a critical component of health outcome research in older adults. However, to date, genetic research in older adults has primarily relied on phenotypes measured at one point of time. Such single time-point measurements cannot be used to determine success at maintaining a biological set-point. From scientific perspective, we hypothesize that within-person trajectories of change illustrate the concept of resilience as a dynamic process; therefore the trajectories could be better predictors of the outcomes than cross-sectional measurements and provide better protection against unmeasured confounding. An overview of statistical methodologies for constructing longitudinal phenotypes that are biologically meaningful and analytically flexible for addressing data challenges including heterogeneity, nonlinearity, measurement error, and missing data will be provided. Applications of these methods will be demonstrated in the next talk using longitudinal grip strength measures from the Women's Health and Aging Study II.

COGNITIVE FUNCTION ENDOPHENOTYPES IN FAMILIES WITH EXCEPTIONAL SURVIVAL

J.D. Walston¹, S. Barral³, R. Mayeux³, N. Schupf³, A.B. Newman², A. Matteini¹, K. Christensen⁴, 1. *Medicine/Geriatrics, Johns Hopkins University, Baltimore, Maryland*, 2. *University of Pittsburgh, Graduate School of Public Health, Department of Epidemiology, Pittsburgh, Pennsylvania*, 3. *Taub Institute and Sergievsky Center, Columbia University, New York, New York*, 4. *The Danish Aging Research Centre, Epidemiology, University of Southern Denmark, Denmark, Denmark*

Objective. To develop cognitive measures into endophenotypes and compare endophenotypes between probands of the Long Life Family Study (LLFS), their offspring and age-matched controls without a family history of longevity. **Background.** Population-based studies have shown that older adults with cognitive impairment have increased mortality, suggesting that preservation of cognitive function is associated with increased longevity. **Methods.** Principal component analysis was carried out in randomly selected individuals from each of the 511 LLFS families to identify cognitive factors. Cognitive factor scores were compared between: i) long-lived probands ii) a population based cohort of age-matched unrelated individuals and iii) offspring of probands and iv) a married-in control group. **Results.** LLFS probands and their first degree offspring performed significantly better on two tests of working memory, digit forward and digit backward, compared with their age-matched control groups. **Conclusions.** Cognitive function may be a useful endophenotype to investigate genetic factors associated with exceptional aging.

AGING PHENOTYPE DEVELOPMENT: GETTING WEAKER VS. BEING WEAK

B.A. Beamer^{1,2,3}, J.D. Walston^{3,4}, L.P. Fried^{5,3}, Q. Xue^{3,4}, 1. *University of Maryland School of Medicine, Baltimore, Maryland*, 2. *Baltimore VAMC GRECC, Baltimore, Maryland*, 3. *Johns Hopkins University Older American Independence Center, Baltimore, Maryland*, 4. *Johns Hopkins University Division of Geriatric Medicine and Gerontology, Baltimore, Maryland*, 5. *Columbia University Mailman School of Public Health, New York, New York*

We hypothesize that the trajectory of decline in muscle strength—a prominent and universal feature of aging—predicts adverse health outcomes. In the Women's Health and Aging Study II, we analyzed the associations of the trajectory of grip strength with the risks of incident falls, disability, and mortality. We found that each standard deviation increase in the rate of decline in grip strength ($= 0.2$ kg/year) reflects a hazard ratio of 2.4 for incident IADL disability, 5.2 for ADL disability and 3.3 for mortality [All $p < 0.01$; Adjusted for age, race, education, and BMI]. Cross-sectional measures of strength do not predict adverse outcomes nearly as well. Because the rate of decline in strength is quite variable in humans, it is an attractive phenotype for genetic analysis. We will discuss the implications of these results on aging phenotype development broadly, as well as specifically regarding analysis and interpretation of genetic association studies.

SESSION 2170 (SYMPOSIUM)

CROSS-CULTURAL AND MULTICULTURAL FRAMING OF SYMPTOMS OF DEMENTIA

Chair: M. Iris, *Research, CJE SeniorLife, Chicago, Illinois*

From both the clinical as well as popular perspective, key symptoms of Alzheimer's disease have largely to do with memory: for example, forgetting the topic of a conversation, where the checkbook is, what the doctor said, your neighbor's name, plus difficulties in word finding. However, although memory loss is a central symptom, behavioral changes are often more salient (e.g. becoming unusually argumentative, getting lost while driving, forgetting to pay the bills). For older adults,

their clinicians and families, such lapses are difficult to distinguish from signs of 'normal' aging. Hence, how one understands normal aging becomes the frame for evaluating both memory lapses and behavioral changes. From a cultural perspective, 'normal aging' is a social construction, and so in turn is Alzheimer's disease. But culture, from an anthropological perspective, is largely invisible to its members. Cross-cultural and multi-ethnic studies can shed considerable light on the manifestations and course of Alzheimer's disease both within and outside the taken-for-granted North American/US frame-of-reference. In this session, we address symptom-beliefs and perceptions of AD among Native Americans (Henderson & Henderson), elderly Chinese (Elliot), older Russian, African American, and Mexican Americans (Iris & Schrauf), and a number of limited English proficiency speakers in a large multicultural, urban area (Morhardt). These studies provide a lens through which we can discern what is culturally variable about aging and by extension what is culturally variable in symptom-beliefs and symptom-perception in AD. Implications for aging policy and clinical practice will be discussed.

CONCEPTUALIZING SYMPTOMS OF ALZHEIMER'S DISEASE IN THREE ETHNIC POPULATIONS

M. Iris, R. Schrauf, *Research, CJE SeniorLife, Chicago, Illinois*

Understanding how different ethnic and minority populations conceptualize AD symptoms is critical to furthering the goal of early diagnosis. This paper presents results of a concept development exercise using pile sort methodology. Symptom statements derived from in-depth interviews with 10 African Americans, 10 Mexican Americans, and 10 Refugees from the Former Soviet Union were sorted into groupings by 30 additional participants from these same groups, based on self-selected principles of similarity. Using graph layout algorithms we analyzed sub-domain symptom clusters, based on proximity and interconnectedness of items. Three predominant symptom clusters emerged (physical symptoms, cognitive symptoms, and symptoms of personality change), with differing levels of within-group agreement (African Americans 55%; Mexicans 40%; FSU 50%), indicating intra-cultural variation. Inter-cultural differences will also be discussed, with implications for public and professional education noted. After attending this presentation, participants will achieve greater understanding of cultural models of AD symptoms in the three populations.

ATTRIBUTIONAL BELIEFS OF DEMENTIA

L. Henderson, J. Henderson, *American Indian Diabetes Prevention Center, University of Oklahoma, Oklahoma City, Oklahoma*

Dementia research among a 60-person, multi-tribal American Indian (AI) sample found etiologic beliefs focusing on stress as causative, medical expertise as unimportant to diagnosis, social service and family most valued, and hallucinations interpreted supernaturally. These views diverged from concepts held by the US majority. This paper uses the viewpoint of AI colonization and resultant contemporary life contexts to hypothesize explanations for the divergent dementia views. Specifically, stress is "undeserved stress" due to cultural subjugation. It is a diffuse, noxious, more or less unconscious perception interwoven into all aspects of life. Consequently, undeserved stress is a culturally connected candidate explaining the invisible loss of mind experienced in dementia. Physicians were viewed as unimportant due to perceived substandard care. Favoring social service and family caregivers was consistent with response to a non-medical condition. Hallucinations interpreted as communications with the "other side" are consistent with beliefs of a thriving non-empirical environment.

ALZHEIMER'S DISEASE IN LIMITED ENGLISH PROFICIENCY POPULATIONS

D.J. Morhardt, *Cognitive Neurology and Alzheimer's Disease Center, Northwestern University, Chicago, Illinois*

Limited data exist on how members of different cultures understand dementia. Results of Administration on Aging (AoA) Alzheimer's Disease Demonstration Grants to States (ADDGS) in 5 limited English proficiency (LEP) communities (Assyrian, Arabic, Bosnian, Hindi, Urdu) revealed 13% of enrolled subjects sought evaluation. Project goals: 1) to understand how these LEP community groups conceptualize dementia; 2) to understand reasons LEP communities sought or did not seek a diagnosis. Forty-eight interviews conducted with family members of persons identified with dementia in person's native language, translated and subjected to thematic analysis. Results: memory loss is explainable and normative – due to aging, reaction to medication or trauma experienced by war, family problems or immigration experience. The primary predictor to not seeking an evaluation was dependent upon psychosocial stressors in the family of more concern. AD education needed in LEP communities to increase awareness of early diagnosis, treatment intervention and management of difficult behaviors.

CLASH OF CULTURES IN DEMENTIA EVALUATION: A CASE STUDY OF CHINESE PATIENTS AND ANGLO-AMERICAN CLINICIANS

K.S. Elliott, *Anthropology, Minnesota State U., Mankato, Mankato, Minnesota*

This presentation explores the cultural clashes that occurred when Chinese patients at an Alzheimer's center in California were evaluated for dementia by Anglo-American clinicians. Because these clinicians were not familiar with Chinese culture, they often misinterpreted the behavior of elderly Chinese patients and their families and, as a result, were more likely to misdiagnose such patients. This presentation is based on data collected from 1993 to 1996 as part of an NIA-funded research project on the sociocultural factors influencing the medical evaluation, case management and family care of demented Chinese elders. Several case studies will be discussed drawing on the author's participation, as the clinical team's medical anthropologist, in diagnostic interviews with patients' families, case conferences with the clinical team, and with family members, and in developing care plans that were culturally appropriate. Presentation attendees will learn to identify sociocultural factors relevant to cross-cultural dementia evaluation.

LATINO FAMILY PERSPECTIVES ON DEMENTIA-RELATED BEHAVIORAL CHANGES: DEVELOPING FLEXIBLE CAREGIVERS

L. Hinton¹, R. Valle³, M. Tzuang², I. Valverde², D. Gallagher-Thompson², 1. *Psychiatry, U.C. Davis, Sacramento, California*, 2. *Sanford, Palo Alto, California*, 3. *San Diego State University, San Diego, California*

Prior research has found that Latino family caregivers report high levels of dementia behavioral problems and associated caregiver distress, and considerable unmet needs for professional help. To inform the development of culturally-tailored psychoeducational materials (i.e. a fotonovela) to help Latino caregivers manage difficult behavioral problems, eight focus groups were held with Latino family caregivers and providers with extensive experience in the Latino community. This paper will present thematic analysis of focus group data and describe how these findings informed the development of a fotonovela. Focus groups identified a broad range of behaviors that are particularly challenging for families, including aggression, depression, sexually inappropriate behaviors, and wandering. Maladaptive and adaptive strategies for dealing with behavioral problems were described by focus group participants. The over-arching theme was the importance of family members developing flexibility in their roles as caregivers and adjusting cultural expectations to the realities of caregiving

SESSION 2175 (SYMPOSIUM)

GETTING SERIOUS ABOUT EXTENDING PALLIATIVE CARE TO NURSING HOME RESIDENTS

Chair: M. Bern-Klug, *Social Work, University of Iowa, Iowa City, Iowa*
Discussant: H. Moody, *AARP, Washington, District of Columbia*

The purpose of this symposium is to discuss how a palliative care approach would benefit nursing home residents, regardless of "dying" status. Indeed, good palliative care is about providing comfort throughout the illness trajectory, not only for the final days and hours. The symposium considers changes in three areas that together would go a long way toward enhancing the nursing home staff's ability to provide excellent palliative care, including 1) the structure and processes of care; 2) a reconsideration of the meaning of the principle of autonomy in terms of residents with cognitive impairment; and 3) greater attention to psychosocial issues throughout the illness course.

THE NEED TO EXTEND THE REACH OF PALLIATIVE PSYCHOSOCIAL CARE TO NURSING HOME RESIDENTS WITH ADVANCED CHRONIC ILLNESS: THE SOCIAL WORK ROLE

M. Bern-Klug, *Social Work, University of Iowa, Iowa City, Iowa*

Improving the quality of living in nursing homes (NH) includes an emphasis on physical and emotional comfort. Comfort is a core concept in palliative care, and as such, can benefit people throughout the illness trajectory, including as the end of life draws near. This session discusses two different models of palliative care, the scope of psychosocial issues found among residents in NH, and the challenges faced by social workers as they strive to identify and address resident psychosocial comfort issues within the context of palliative care.

THE STRUCTURE AND PROCESS OF ADVANCED CHRONIC ILLNESS AND PALLIATIVE CARE IN NURSING HOMES

S. Thompson, *Nebraska Medical Center College of Nursing, Omaha, Nebraska*

All permanently placed nursing home residents will die in a nursing home or hospital. In 1987, the focus of nursing home care changed from custodial to rehabilitative; nursing homes are to improve the quality of residents' care through maximizing the physical, mental, and psychosocial well-being of residents. Focusing solely on restorative interventions, which many nursing homes do in response to fear of regulatory scrutiny and care deficiencies, leaves many residents potentially receiving inappropriate, aggressive, rehabilitative care. Palliative care is focused on the quality of life of those who live with life-limiting illnesses through the relief of physical and psychosocial suffering; thus, it is appropriate for all nursing home residents. A simultaneous approach is needed, where both restorative and palliative care interventions are provided to residents upon admission and throughout their stay, where only the balance between the two changes over time. Strategies for developing and maintaining this balance are discussed.

A CONCEPTUAL FRAMEWORK FOR EVALUATING MEASURES OF END OF LIFE IN LONG-TERM CARE

J. Munn, *College of Social Work, Florida State University, Tallahassee, Florida*

Although an estimated one-quarter of older adults die in long-term care settings, less end-of-life research has been conducted in these settings when compared with hospitals or community-dwelling older adults. This is an important omission that is exacerbated by the dearth of well-validated assessment instruments specifically designed to measure the quality of care, quality of life, and quality of dying in nursing homes and assisted living facilities. This presentation will examine some of the conceptual and methodological challenges of evaluating end-of-life care in this and other settings. Furthermore, the author will provide an overview of existing measures and will describe issues specific to the

long-term care setting such as high rates of dementia and long periods of chronic illness prior to death. In addition, the presentation will examine issues such as surrogate respondents and timing of evaluation. Finally, the author will make suggestions regarding both formal and informal assessment

GETTING SERIOUS ABOUT ETHICAL ISSUES IN ADVANCED CHRONIC ILLNESS AND AT THE END OF LIFE

C.E. Gessert¹, D.F. Reynolds², 1. *Education and Research, SMDC Health System, Duluth, Minnesota*, 2. *University of Missouri, Columbia, Missouri*

Most of the principles and concepts currently used in American bioethics were conceived and nurtured in the world of acute care. These principles are based on an idealized model of autonomy, in which the patient provides or withholds consent for surgical procedures or participation in research, acting as a free agent. There are well-recognized differences between autonomy in the acute care setting, where the focus is on decisions that are discrete in time and place, and autonomy in the family or nursing home setting, where individual autonomy is tempered by the demands and constraints of ongoing living in an intimate community. This presentation provides an overview of common ethical issues encountered in nursing homes, and an analysis of how familiar ethical principles may be applied in the resolution of these issues. The presentation focuses on a preventive ethics approach, in which potential ethical problems are anticipated and addressed.

SESSION 2180 (PAPER)

HOME AND COMMUNITY BASED CARE - PAPER

HEMOCARE WORKERS' RISKS OF OCCUPATIONAL INJURIES AND CREATIVE SELF-PROTECTION IN TAIWAN'S CULTURAL CONTEXT

P. Wang, *None, Pingjen City, Taoyuan County,, Taiwan*

Prior studies that explored healthcare workers' occupational injuries tended to focus on the physical working environment at institutional settings, such as nursing homes or hospitals. Few studies have attended to the physical challenges that community healthcare workers encounter at their clients' homes in various cultural contexts. This study aims to investigate the challenges that homecare workers have encountered when carrying out various care tasks at their clients' home in Taiwan's cultural context. This study used qualitative methods to investigate the ways in which homecare workers (both men and women) carried out various homecare tasks at 100 service users' homes in Taiwan's National Homecare Program in 2006 and 2007. Findings reveal that in addition to high risks of musculoskeletal disorders, homecare workers in the Taiwanese cultural context have faced a higher risk of motorcycle accidents than their counterparts in institutional settings. Also, the source of homecare workers' hazards of musculoskeletal disorders arose not only from the workers' having to carry out heavy-duty tasks frequently but also from having to do so on their own (without any co-worker) and often within the constraints of clients' small bathrooms in typical Chinese housing styles. Such hazards were exacerbated by three program-design problems: (1) the program's mandated organization of tasks, which lacks rectification of the imbalance between clients' quality of life and workers' long-term well-being, (2) the problematic evolution of client-worker power relationships under the program's "rights-talk" framework, and (3) the characteristics of the highly skewed client population drawn into using Taiwan's National Homecare Program.

EXPANDING COMPREHENSIVE HOME CARE TO INDIAN COUNTRY

T. Edes¹, B. Finke², R. Greene¹, G. Hoffman¹, H. Tompkins¹, 1. *Department of Veterans Affairs, Washington, District of Columbia*, 2. *US Indian Health Services, Washington, District of Columbia*

The missions of both VA and IHS include providing health care for American Indian and Alaska Native (AIAN) veterans. In comparison to other veterans, AIAN veterans have higher prevalence rates of Post Traumatic Stress Disorder and greater unmet health needs. The growth of the AIAN elderly population and prevalence of chronic disease among AIAN contributes to a medically complex population with increasing disability and long term care needs. Many AIAN receive care from both VA and IHS/Tribal health programs. Lack of primary care coordination between these systems may result in duplicated care, potential conflicts in treatment, increased possibility for medication errors, delays in treatment, and longer patient visits in primary care settings. Home Based Primary Care (HBPC) is comprehensive longitudinal primary care delivered in the homes of veterans with complex chronic disease and disability – veterans for whom routine clinic-based care is not effective. HBPC provides on-going monitoring of the veteran's chronic care needs and identifies problematic conditions before they require acute interventions. VA HBPC has challenges in outreach to rural areas, limited by driving distances. IHS and Tribes have limited outreach to those with chronic disabling disease. To better serve rural AIAN veterans, VA and IHS entered into a partnership to extend HBPC using IHS and tribal clinics and hospitals involving 14 tribes. This innovative partnership will infuse geriatric competencies and care coordination models into settings that are medically underserved and serve as a template upon which to build future partnerships among VA, other federal agencies and non-VA partners.

SOCIAL WORKERS AND DISTRICT NURSES IN COMMUNITY CARE PRACTICE: FRAMING IDEOLOGIES AND INTERACTIONS WITH OLDER PEOPLE

M. Sullivan, *Brunel University, Uxbridge, Middlesex, United Kingdom*

This paper reports on the outcomes of a grounded theory study that examined ideology within social work and district nursing practice interactions with older people. Erving Goffman's frame analysis was applied to examine the principles of organisation governing subjective meanings within the professional encounter. Semi-structured depth interviews were conducted with 40 practitioners in two locations in England. The raw data was coded to generate concepts and then recontextualized for analysis within the developed categories which were conceptually and empirically grounded. The data underwent further examination to establish substantive relationships between the categories allowing both themes and explanations to emerge. The study's major findings were as follows: (1) meanings projected into the encounter were anchored within government and professional discourse, as well as individual perceptions about what was best for older people; (2) the described encounter was professionally managed in that the practitioner's understanding of the social events enabled him/her to organize and influence the interaction in absence of any strategic intention; and (3) practice dilemmas arose as practitioners attempted to intervene with older people informed by their professionally based values juxtaposed against those supported within official discourse. The frames governing interaction varied among and within the two professional groups leading to varied care pathways for older people, and fostering conflict within interprofessional working. The findings demonstrate the need for practitioners to develop an understanding of how they construct their social realities in a complex community care environment, and ultimately how they organise the experience of community care for older people.

HOME- AND COMMUNITY-BASED SERVICE USE AND AGING-IN-PLACE ANTICIPATION AMONG COMMUNITY-DWELLING OLDER ADULTS

F. Tang, Y. Lee, *University of Pittsburgh, Pittsburgh, Pennsylvania*

Increasing numbers of older adults, especially the oldest-old and those aging with disabilities have created an increasing demand for a board array of home- and community-based services (HCBS). The traditional long-term care that entailed long-term placement in the nursing home institution has given way to transient post-acute and rehabilitation placement; assisted living facilities and HCBS such as adult day care, which have become more prevalent and available. Also a majority of older Americans have the preference for living independently and receiving long-term care in their homes or community settings. The expansion of HCBS is expected to help meet the increasing needs for remaining in the community among the older population. Using the data from Community Partnership for Older Adults Program Survey which is a representative sample of older adults aged 50 and older in 13 communities (N=4,501), this study examines the prevalence of utilization of HCBS and its association with aging-in-place anticipation among community-dwelling older adults. Very few elders have ever used these services; from 1.4% using assisted living to 16.5% using senior centers. However, the previous experience with adult day programs, house-keeping, senior lunch, helpline, and personal assistance was associated with the likelihood of anticipation for remaining at home under regular help, especially among vulnerable adults who were older than 75 or reported fair or poor health status. The findings have implication for raising the public awareness of HCBS and the effective use of the services in serving the community-dwelling elders.

COMPASSION FATIGUE – THE SILENT EPIDEMIC FACING HELPING PROFESSIONALS WORKING WITH OLDER ADULTS IN RURAL COMMUNITIES

E.T. Jurkowski, *School of Social Work, Southern Illinois University Carbondale, Carbondale, Illinois*

Compassion Fatigue (CF) is becoming recognized in helping professions as a silent disease which is beginning to impact people in the helping professions who are increasingly stressed, and impacted by trauma for prolonged periods of time. Professionals working with older adults are a group of silent victims, whose vulnerability is often unnoticed and underestimated. Thus, unrecognized CF for professionals can lead to a lack of ability to detect signs of mental distress for older adult consumers. This presentation will describe some of the signs and symptoms of CF, differentiate CF from ‘burnout’ and present some findings on the incidence and prevalence for professionals working with older adults. Data examining three subscales, compassion fatigue, compassion satisfaction and burnout (Stamm, 2003) were used to identify the level of CF experienced by helping professionals working with older adults in rural settings in the Midwest. (n=212). Findings suggest that the longer a person has been in their specific helping role, the more likely they are to be suffering from burnout and compassion fatigue, and the more likely they are to suffer from dissatisfaction with their role. Training and education do not seem to serve as a mediating factor, however, marital status does serve as a protective factor. Solutions will be addressed at the conclusion of the paper.

SESSION 2185 (PAPER)

IMPROVING CARE IN RESIDENTIAL SETTINGS

THREE DIMENSIONS OF MEDICATION REGIMENS FOR RESIDENTS IN LONG-TERM CARE SETTINGS

T. Shaffer, 1. *University of Maryland, Doctoral Program in Gerontology, UM/UMBC, Baltimore, Maryland*, 2. *University of Maryland, The Peter Lamy Center for Drug Therapy and Aging, Baltimore, Maryland*, 3. *University of Maryland, School of Pharmacy, Department of Pharmaceutical Health Services Research, Baltimore, Maryland*

Medication use in institutional long-term care settings is dynamic due to the in-house ability to prescribe new or adjust current medications. To date there are only a few studies that characterize drug use in this setting, and they only offer snapshots that describe the use of any medication during the year, or during the time of survey. What is not captured in these studies is the temporal aspect of changes in medication use over time. Using data from the Medicare Current Beneficiary Survey for the years 2001-2004, monthly medication regimens for approximately 2,700 unique residents are constructed and then tracked for changes over time. This presentation reviews the unique qualities of medication administration in this setting and how that influences the construction of medication regimens and the measurement of their change when looked at by time, depth of regimen, and resident characteristics. First, the presentation of medication regimens by single therapeutic classes will be used to illustrate broad temporal aspects of use as a whole, and then introduces the idea of volatility (or changes) within class. From these single class examples, depth of regimens will be featured by combining multiple classes to form more complex and realistic medication regimens. Finally, an assessment of regimens by resident characteristics and type of residential setting will be shown. The implications of the three dimensions of time, regimen depth, and resident characteristics on the use of medication regimens as an indirect measure of medication quality will be discussed.

PLANNING THE DEVELOPMENT OF AN ELECTRONIC INFORMATION SYSTEM FOR RESIDENTIAL CARE FACILITIES FOR THE ELDERLY

C. Flores¹, R. Newcomer¹, J. Hiratsuka², 1. *Social and Behavioral Sciences, University of California, San Francisco, San Francisco, California*, 2. *California Department of Social Services, Sacramento, California*

This study was designed to facilitate the planning and development of enhancements to the Residential Care Facility for the Elderly (RCFE) information system in California. These enhancements are intended to produce a consumer-oriented web-accessible information resource, as well as improve the efficiency for the state regulatory agency by utilizing data that it is collected by the state agency and RCFE providers. Information related to quality of care, such as facility, staff, and resident characteristics; types of services provided; regulatory compliance; and resident outcome data are collected. The project is collaboration with the California Department of Social Services, Community Care Licensing Division (CCLD). A multidisciplinary workgroup, including state licensing managers and staff, RCFE providers, advocates, consumers and researchers, was organized. The workgroup participated in the identification and formulation of necessary and optional components of RCFE information. Web and electronic data system consultants aided in the development of the reporting formats, web site presentation formats, and planning for pilot testing the electronic web service system. Reported in this presentation are the information collection and screen prototypes for licensee web portal services, and the alternatives considered in the planning and development of an electronic information system for RCFEs. The product is designed to use health information technology to make information available to consumers, to increase

access to care, and to improve the quality of long term care by providing information for facility management, industry and regulatory planning and policy purposes. This study was funded by the California Healthcare Foundation (grant #08-1915).

MULTIMEDIA EDUCATIONAL TOOL TO IMPROVE OUTDOOR ACCESS IN LONG TERM CARE

S. Rodiek, *Architecture, Texas A&M University, College Station, Texas*

Access to nature and the outdoors has been found to promote health and well-being in older adults in long term care (LTC) settings, and may be especially critical for those with limited mobility. In spite of recently increased interest in environmental influences on health, many LTC facilities do not employ evidence-based design principles when creating outdoor space for residents. To improve the quality of outdoor access, an interdisciplinary team of architects, gerontologists, landscape architects, and educational psychologists have developed an innovative media-based educational tool, geared toward a broad range of decision-makers in the LTC industry. This multimedia DVD program provides evidence-based guidelines on key issues such as outdoor walkways, shade, accessibility, and connection with the indoors. Psychosocial goals are linked to specific architectural features, and multiple examples show how the central concepts can be applied in diverse situations. Interactive exercises assess user comprehension of important concepts, and provide immediate feedback. The presentation will demonstrate this new educational tool, funded by National Institute on Aging SBIR Grant #R44AG024786-02, and describe how decision-makers can use design guidelines to improve residential environments for frail older adults.

REPORTING ADVERSE EVENTS IN NURSING HOMES

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Each year, approximately 8 million adverse events such as falls, medication errors, burns, abuse, and nosocomial infections occur among vulnerable nursing home residents across the U.S. The most commonly used method of reporting an adverse event in nursing homes is through documentation on an incident report. The practice of monitoring adverse incidents in nursing homes is unclear since there is currently no standardized method to investigate, document, and disseminate information- though a standardized taxonomy has been developed for hospitals. We conducted a mailed survey to a randomly selected group (n=1,000) of nursing home administrators across the U.S. to examine the incident reporting practices in nursing homes and identify to what extent these data are used for improving the safety of residents. Of the responders (n=256), the average number of incident reports collected per month/per facility was 23. Only 16% of the homes use a computerized entry system of incidents, whereas the majority use a written format. Events such as falls, skin tears, medication errors, and pressure ulcers are reported "Always" in a majority of facilities (95%) and only reported to the State Health Department when a sentinel event occurs. However, events such as abuse, elopement, suicide, and violence issues are "Always" reported to the State. Most events are reported to the State through a fax (59%) or phone call (66%) whereas only 17% of facilities report using electronic methods. Only 30% of respondent homes report notifying the U.S. Food and Drug Administration for events involving medical devices or drug events. Implications for practice and policy will be addressed.

SESSION 2190 (SYMPOSIUM)

TEACHING INNOVATIONS FOR GERIATRIC MENTAL HEALTH COMPETENCIES: MULTIDISCIPLINARY APPROACHES

Chair: S. Diwan, *San Jose State University, San Jose, California*

Discussant: R. Watman, *John A. Hartford Foundation, New York, New York*

Demographic data show a critical need for educating the workforce in social work, medicine, and nursing to address mental health needs of a burgeoning older population. Currently, very little training on geriatric mental health is provided to students in these fields. This symposium highlights teaching innovations to increase geriatric mental health competencies in the three disciplinary curricula which have been developed through separate grants from the John A. Hartford Foundation. For social work: Gellis et al describe web-based teaching modules focusing on schizophrenia, dementia, depression, and anxiety. Designed as mini reviews, they contain empirically-based lecture notes, presentation slides, case studies, and class exercises. Gelman et al describe computer-mediated modules containing video segments of actual intern encounters with older adults and supervisory sessions that model openness and self-reflection. Both projects provide qualitative evaluations of the modules from faculty and students. For geropsychiatry: Moutier et al describe the development of a clinical case of dementia utilizing "standardized patients" as a learning encounter to enhance competence of medical students in geriatric psychiatry during their psychiatry rotation. Tew et al describe an interdisciplinary educational intervention for psychiatry, social work, and nursing to successfully improve patients' transitional care outcomes by increasing rates of accepted home health referrals for patients discharged from inpatient units. For nursing: Evans et al describe process, outcomes, and policy impacts related to development and dissemination of Geropsychiatric Nursing Enhancements to current competencies for various educational levels and specialties. Goals and challenges to dissemination are discussed within a national and interdisciplinary context.

DEVELOPING EVIDENCE-SUPPORTED MENTAL HEALTH & AGING CURRICULA FOR ADVANCED GRADUATE SOCIAL WORK PRACTICE

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The current and projected shortage in the mental health workforce point to a critical need in social work education to prepare graduate MSW students to address the mental health needs of an aging population. In a recent NASW survey, 75% of licensed social workers reported working in some capacity with older adults and their families. Yet few MSW students are trained to address geriatric mental health issues. We describe the development of a web-based Mental Health and Aging Teaching Module that addresses aging competencies and content designed for advanced practice and mental health courses in social work curricula. The evidence-based modules focus on schizophrenia, dementia, depression, and anxiety and are designed as mini reviews containing empirically-based lecture notes, presentation slides, case studies, and class exercises that are faculty user-friendly. Through faculty and student focus groups, we report on ease of use, quality, and content of these teaching modules.

USING WEB-BASED MODULES TO ENHANCE CLINICAL SKILLS AND SELF-AWARENESS IN SOCIAL WORK STUDENTS

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This paper describes the development, implementation and evaluation of computer-mediated modules designed to expose all social work students to geriatric behavioral health practice. The modules introduce clinical assessment, diagnosis, and intervention skills and knowledge

about depression, substance abuse, family caregiving, and supervision in work with older adults. Each unit contains video enactments of an actual student's home or agency-based clinical interview followed by a supervision session that models openness and self-reflection. Accompanying discussion questions, classroom exercises, supplemental readings and resources help to promote learning and enhance usefulness for educators in a range of social work classes. Preliminary evaluations suggest positive responses among students, who report increased knowledge about and interest in working with older adults and their families. Participants found the supervisory segments to be particularly effective in promoting learning.

AN APPROACH TO ENHANCING GERIATRIC PSYCHIATRY EDUCATION DURING A MEDICAL SCHOOL CURRICULUM REFORM

C. Moutier, A. Sciolla, J. Keri, B. Winegarden, H.M. Hoffman, D.D. Sewell, D. Jeste, *Psychiatry, University of California, San Diego, La Jolla, California*

In June 2006 the American Association of Medical Colleges announced an intent to expand the number of American medical students by 30% by year 2015 to meet the projected demand for skilled physicians capable of caring for the growing population, particularly older individuals. At UCSD School of Medicine, we completed a thorough survey of preclinical and clinical curricula, and found relatively few and poorly integrated didactic hours dedicated to geropsychiatric education. A multi-pronged approach was utilized to enhance the education during all four years of medical school. One method, which is the focus of this presentation, was the creation of a learning encounter to enhance competence of medical students in geriatric psychiatry. This involved development of two standardized patient cases presenting with depression and dementia to teach third year medical students during their Psychiatry rotation. Qualitative and quantitative data on student and faculty feedback on the learning encounter will be presented.

ENHANCING TRANSITIONAL CARE SERVICES FOR OLDER PATIENTS DISCHARGED FROM PSYCHIATRIC HOSPITALS

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Background: Older patients discharged from psychiatric hospital experience many barriers to attending follow-up care. Suicide risk is greatest in the months following discharge. The lost-to-follow-up rates are high. Needed in-home services are often overlooked in discharge plans of psychiatrically impaired elders. **Intervention:** As part of a broader effort to improve transitional care at discharge, our interdisciplinary team (a psychiatrist, social workers, and home health nurses) at Western Psychiatric Institute & Clinic's 41-bed inpatient geropsychiatry unit identified barriers to home-health referral prior to discharge. We created a pre-printed order form to educate referring and receiving parties on functional impairments resulting from psychiatric illness, and instituted monthly referral practice review meetings with inpatient psychiatry and social work. **Results:** An increase in rates of home health referrals from 18.5% to 43.7% (including 70% of patients discharged to their homes). This was sustained over a year, even after the practice review meetings ended.

GEROPSYCHIATRIC NURSING COLLABORATIVE: PROGRESS AND PROMISE

L.K. Evans², C. Beck³, K.C. Buckwalter¹, *1. College of Nursing, University of Iowa, Iowa City, Iowa, 2. University of Pennsylvania, Philadelphia, Pennsylvania, 3. University of Arkansas, Little Rock, Arkansas*

This presentation highlights activities of the Geropsychiatric Nursing Collaborative, a four-year, multi-site (Penn, Arkansas, Iowa) initiative funded in 2008 by the Hartford Foundation and housed at the American Academy of Nursing. Specifically, background, process and outcomes related to the development, vetting, and dissemination of Geropsychiatric Nursing Enhancements to extant competencies for various levels and specialties within nursing are presented. Next, current efforts to identify, adapt and develop curricula and continuing education offerings to enable nurses to meet those competencies and to expand the knowledge base and policy impact of geropsychiatric nursing are discussed. Finally, future project goals and challenges are described within a national and interdisciplinary context.