Section I: The Challenge of Heterogeneity

The Meaning of Heterogeneity: An Introduction

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In response to widespread, popular perceptions of homogeneity among elderly persons, gerontologists are quick to point out that the older population comprises extensive variation, perhaps more so than any other age group. Despite the vociferous calls for the public to become more aware of differences among older persons, there are relatively few empirical studies that report measures of heterogeneity, dispersion, variation, or diversity. The struggle between two competing goals of inquiry — identifying and explaining central tendencies or commonalities versus identifying and explaining systematic variations — seems to end more often than not with the researchers focusing on means or averages and giving short shrift to the range of responses or outcomes (Nelson & Dannefer, 1992).

The purpose of this symposium is not to document age heterogeneity empirically, but rather to develop theoretical understandings of the mechanisms that contribute to heterogeneity among aged persons. The three authors begin from sociological perspectives, but then call upon theories and research from other disciplines to gain a deeper and fuller understanding of the structures and processes underlying heterogeneity.

Toni Calasanti ("Incorporating Diversity: Meaning, Levels of Research, and Implications for Theory") distinguishes diversity from heterogeneity, terms often used interchangeably, and then explores the significance of diversity for gerontological research and theory. Drawing upon feminist theories, theories of political economy, and empirical examples from work and retirement, she shows how diversity "provides a framework that is built upon the experiences of a particular group or groups as they are situated in the web of interlocking power relations" (author’s emphasis). Calasanti demonstrates how comparative research, a technique often used to address "diversity," falls short of providing a complete picture, because the concepts used for such studies are often created using the dominant group’s experience, and then comparing the "other" group’s experience to that of the dominant group. Instead, she argues, concepts and theories should be developed by keeping in mind from the beginning a range of socially situated human experiences, rather than just the "normal" or dominant group’s experience. Calasanti concludes with a discussion of diversity at the international level.

Heterogeneity of health status among older persons results from an accumulation of factors across the life course — health behaviors (e.g., smoking, exercise, diet), access to health care, exposure to physical environments, and exposure to social environments. While the force of mortality serves to reduce some of this heterogeneity, considerable variation remains among the older population (Hertzman, Frank, & Evans, 1994). In the second article, "Age, Socioeconomic Status and Exercise Self-Efficacy," Daniel Clark develops a model of exercise self-efficacy, one of the "strongest predictor[s] of exercise adoption." His use of a focus group, consisting of nine older African American women from a large inner city health clinic, demonstrates an inductive approach to theory construction. As Calasanti suggests, Clark listens to the experiences of this group from their own perspective, not in comparison to the "normal" experiences (e.g., white, middle-class males). Because exercise self-efficacy has important implications for policy and practice, Clark’s choice of focus group participants is particularly important, as only one of the nine participants was doing any regular physical activity. Further refinements of exercise self-efficacy would also need...
to incorporate the experiences of persons who already exercise regularly, as well as other dimensions of heterogeneity, a point that Clark himself notes.

In “Aging and Heterogeneity: Genetics, Social Structure, and Personality,” John Light, Jill Grigsby, and Michelle Bligh address the issue of increasing heterogeneity across the life course, looking specifically at personality. They compare theoretical explanations of social allocation processes, human development and behavioral genetics. Each perspective provides explanations for the ways that individual personalities evolve, with particular characteristics becoming more accentuated over time, as individuals interact with the social structure. By synthesizing theories and findings from the different perspectives, the authors explain macro-level heterogeneity as a function of micro-level processes. This article, in particular, demonstrates the need for gerontologists to be aware of how researchers from separate disciplines approach the same substantive topic, often addressing similar processes, but emphasizing somewhat different aspects of the process.

All three articles demonstrate that for theory construction to be comprehensive, gerontologists need to incorporate diverse or heterogeneous experiences, be aware of multidisciplinary perspectives, and consider various levels of analysis from the start. The next challenge for gerontologists is to design empirical studies that go beyond identifying central trends or averages. Measuring and explaining a full range of variation needs to take priority.

References


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Nominations for Prestigious Awards
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Robert W. Kleemeier Award
To a Fellow of The Gerontological Society of America in recognition of outstanding research in the field of gerontology.

Donald P. Kent Award
To a Fellow of The Gerontological Society of America who best exemplifies the highest standards for professional leadership in gerontology through teaching, service, and interpretation of gerontology to the larger society.

Glenn Foundation Award
Open to all scientists, regardless of field or nationality, for significant research contributions to the biology of aging.

Nathan Shock New Investigator Award
For outstanding contributions to new knowledge about aging through basic biological research.

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