

# **The Societal Context of Aging Individuals' Behavior**

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**Paper Presented**

**as Part of a Symposium on**

**Investing in the Future of Aging: The Psychological, Sociological and**

**Anthropological Coalition**

**L. W. Poon, G. L. Maddox, & C. L. Fry, Organizers**

**at the Annual Meeting of the**

**Gerontological Society of America**

**Washington, DC**

**November 19, 1992**

# LINKAGES BETWEEN SOCIAL STRUCTURE AND INDIVIDUAL DIFFERENCES IN AGING

Social Context of Aging

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## **THE SOCIETAL CONTEXT OF AGING INDIVIDUALS' BEHAVIOR**

My own work over the past thirty-five years has dealt with describing the course of the development of intelligence from young adulthood into old age, and determining the factors that lead to the vast individual differences occurring in this process. During these efforts I have become sensitized, often through the efforts of my sociological and anthropological colleagues, to recognize the need of attending to and more carefully assessing the impact made by the manifold social-environmental factors upon the course of adult intellectual development. I will briefly summarize here some of the conclusion I have reached from my review of the relevant theoretical and empirical literature that may inform our future research directions in the study of individual aging.

Questions with regard to the vast differences in individual patterns of aging have progressed from the description of age-related patterns of change to the identification of antecedents that might account for these differences. As a mechanism for understanding individual differences, developmental psychologists have increasingly recognized the importance of context in the study of intellectual change (Schaie, 1984, 1986, 1989a, 1989b). The recognition of the importance of context has influenced theorists of all approaches, whether those who are psychometrically inclined, neo-Piagetians, neo-functionalists, or those researchers who emphasize elements of information processing (Baltes, Dittman-Kohli, &

Dixon, 1984; Berg & Sternberg, 1985; Labouvie-Vief, 1985; Labouvie-Vief & Chandler, 1978; Schaie, 1984, 1989a; Schooler, Kohn, Miller, & Miller, 1983). However, although there seems to be widespread agreement on the need to link social-environmental factors to individual development, the literature that actually attempts this task remains relatively sparse.

In order to understand the variations in patterns of aging, researchers have begun to examine the contextual parameters, usually defined as social macro and micro-structures, that might be related to psychological development (Schaie, 1989c). At the macro-level, demographic structures have been linked to psychological development (Atchley, 1989) and differences among successive birth cohorts in patterns of intellectual ability change have been linked to demographic characteristics (Schaie 1990, Willis, 1989). Common to all levels of analysis is the belief that structural variables have direct causal impact on the direction and rate of behavioral development (Schaie, 1989c).

Ecological researchers have cautioned us that the term environment lacks specific definition and is often based on the idiosyncracies of particular researchers (Bronfenbrenner, 1990, Lawton, 1989). Although structural aspects of environments, such as housing or neighborhood composition often characterize ecological research (cf. Lawton, 1974, 1989, Scheidt & Windley, 1985), studies of individuals' maintenance of competence, motivation and personality traits are more likely to and have focus on micro-environmental dimensions including variables such as work,

leisure-time activities, or the environment changes resulting from retirement.

### Examples of Empirical Studies

#### Work Related Studies

The longitudinal research program of Kohn and Schooler (1983) provides, perhaps, the best illustration of contemporaneous and longitudinal effects of the work environment on intellectual flexibility. In their study, a representative sample of men responded to an interview questioning the conditions of their work place and their ability to respond to complex situations, first in 1964 and again ten years later. Longitudinal models testing the reciprocal effects of job conditions and ideational flexibility determined that substantive complexity of the current job positively affected ideational flexibility, whereas the ideational flexibility was influential for future job complexity.

Schooler (1987) has proposed a general theory of the effects of complex environments on psychological functioning. He theorizes that a complex environment, defined by diversity of stimuli, numerous decisions, ill-defined contingencies, produces conditions which reward cognitive effort and encourage the person to develop his/her intellectual capabilities. Simple environments, on the other hand, may fail to reward this effort sufficiently and thus over time, cognitive functioning may decline. Propositions drawn from the theory have been successfully tested and that

the theory is heuristically useful in linking the research findings of different life stages and levels of analysis (Spenner, 1988).

### Leisure Related Studies

Leisure research has typically focused on determining the types of activities people engage in, but some studies have investigated the relationship of leisure to successful aging (Palmore, 1979). An example may be found in the work of De Carlo (1974) work in the context of the Aging Twin Study (Jarvik & Bank, 1983). In that study sixty elderly twins were followed over twenty years. Recreational participation was defined by number of different activities and frequency of participation over the lifespan. The activities were grouped into three dimensions, sensory-motor, cognitive, and affective. These activities were related to a three category index of successful aging based on the subjects' ability to carry on daily activities and the presence or absence of illness. Successful aging was significantly correlated with total activity. In addition a substantial correlation was observed between the cognitive dimension of leisure activities and intellectual performance on the Wechsler-Bellevue test.

### Retirement

Leisure is often considered a complement to work, but in the case of retirement the interplay between work and leisure ends and leisure assumes the more primary role. Rosow (1985) has argued that as individuals age they lose important roles, such as the work role, and these losses may have far reaching effects on their abilities to cope and function effectively. Rosow

suggests that role loss may decrease social participation and devalue a person's sense of identity and that people are often not well socialized to the inevitable facts of aging and the losses that occur with increasing age. Retirees are often found to continue patterns established on the job by keeping busy and industrious. Ekerdt (1986) argues that many individuals legitimize their retirement every day by adherence to this busy ethic in order to provide an acceptable definition to the retirement role both for the retiree and those of their observers whose perception is valued by the retiree.

The interactions between prior work environment and retirement may turn out to be exceedingly complex. Analyses from the Seattle Longitudinal Study have shown that people who retire from highly complex occupations show accelerated decrement following their retirement when compared to those of the same age who continue to work. On the other hand, those who retire from a routinized job showed no decrement following their retirement, even though their working comparison group did show decline (Dutta, Schulenberg, & Lair, 1986).

#### Multi-Faceted Descriptions of Micro-Environments

The influence of numerous micro-level environmental factors upon intellectual performance have also been investigated in the Seattle Longitudinal Study. A *Life Complexity Inventory* (LCI) was constructed to collect data on many aspects of the interpersonal, work, social, structural, and cultural aspects of the SLS participants' micro-environment. Questions

asked in this inventory cover, for example, basic demographic information, home environment, frequency of leisure activities, characteristics of the work and homemaking environment, neighborhood composition, travel, mobility, reading activities, continued educational pursuits and social network data.

Gribbin, Schaie, and Parham (1980) analyzed the information gained from the LCI by initially clustering all variables included in the questionnaire. The results indicated that the variables could be clustered into 8 types: 1) subjective dissatisfaction with lifestyle 2) social status 3) noisy environment 4) family dissolution 5) disengagement from environmental interaction 6) semi-passive engagement with the environment 7) maintenance of acculturation 8) female homemaker characteristics. Changes in performance on the Primary Mental Abilities over a 7-year span were correlated with these cluster scores. In general, disengagement and dissolution were associated with greater cognitive decrement, while dissatisfaction with life style was associated with maintenance or improvement in functioning. These lifestyles do predict later cognitive performance. The social status cluster predicts high performance at a later time for many abilities, while the disengagement cluster has a systematic negative relationship. These findings provide evidence that a number of contextual factors can be isolated which account for individual differences in the pattern and rate of ability decline in old age (Schaie, 1984, 1989a).

### Summary and Conclusions

We are making progress in our understanding of individual differences in psychological development in adulthood and old age. A number of researchers have successfully linked complex work environments, more active lifestyles, as well as advantaged environments and lifestyles to the maintenance of high levels of cognitive performance into old age. Obviously, the strength of effect of an environmental factor will vary depending upon the specific individual differences variable being investigated. Not every environmental context will have a direct impact on each dependent variable (Willis, 1987, Willis & Schaie, 1986), there is need to define environmental factors with greater specificity and sharpen hypotheses that try to explicate their potential influence upon cognitive functioning.

Although there is much speculation among social scientists on the advantages of higher social economic status, the mechanisms that would link social status to individual aging remain to be explicated (Bronfenbrenner, 1989). Researchers have addressed the direct effects of job complexity and the direct effects of leisure activities, but we know very little about the combined effect of these or other environmental variables.

Much of the research linking social-environmental contexts and individual differences in psychological processes has been static, examining relationship at only one point of time. The relationships explicated by such study designs are, of course, strictly correlational and one cannot judge either the predictive nature of environmental factors or the reciprocal



influences between performance and environment. Future research must therefore depend heavily on longitudinal paradigms in order to be able to assess both changes in cognitive performance over time and changes in the environment in a manner that will allow adequate tests of causal models that will advance our understanding of the complex relationships examined in this paper.

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**Author Note**

This paper is a condensed and revised version of a previously published chapter (Schaie & O'Hanlon, 1990) that deals more extensively with the influence of social-environmental factors in the maintenance of adult intelligence. The present paper seeks to generalize the more limited statements made in that chapter to the effects of societal context upon individual aging patterns.