

SLS Newsletter

DESCRIPTION OF THE SEATTLE LONGITUDINAL STUDY

THE PENNSYLVANIA STATE UNIVERSITY

SPRING 2001

A Brief History of the Seattle Longitudinal Study

The Seattle Longitudinal Study (SLS) was begun by Dr. K. Warner Schaie in cooperation with the Group Health Cooperative of Puget Sound (GHC). The purpose of the research is to study various aspects of psychological development during the adult years. In 1956, five hundred Group Health members participated in the first study. They were randomly selected from the Group Health membership and ranged in age from the early 20s to the late 60s. The study has been continued in seven-year intervals: 1963, 1970, 1977, 1984, 1991, and 1998. At each interval all persons who had previously participated in the study were asked to participate again. In addition at each seven-year interval, a new group of persons randomly selected from the Group Health membership were asked to participate. Approximately 6000 persons have now participated at some time in this study. Of the original participants, 40 persons remain who have now been in the study for 42 years. Current participants range in age from 22 to 95 years. In addition to the main study, we collected data in 1989/90 from many adult children as well as sisters and brother of our main study participants in order to determine the extent of family similarity in mental

abilities and other psychological characteristics. Many of these relatives were studied again in 1996/97.

The Seattle Longitudinal Study is considered to be one of the most extensive psychological research studies of how people develop and change through adulthood. Dr. Schaie and his colleagues have written a monograph and over 70 articles and chapters in scientific publications on findings from this study. Dr. Schaie has testified before congressional committees regarding findings from the study, and study results have been used in legal proceedings on age discrimination in employment as well as in policy discussions regarding mandatory retirement practices in the United States and Canada.

Family Similarity Study That Included Your Parents

In 1989 a new component of the SLS was begun to study the similarity in mental abilities and some other psychological characteristics among adult family members including your mother and father. Similarity in mental ability performance has been known to exist for parents and their young children, perhaps because they live in the same environment. If similarities persist when family members become adults and strike out on their own, then it would be more likely that family similarity in

(Continued on Page 2)

Family Similarity in Mental Abilities

(Continued from Page 1)

abilities might in part be inherited. This study examined whether family similarity in mental abilities is found not only at early ages but is maintained throughout adult life.

Participants in the SLS were asked to provide names and address of their adult children and of their brothers and sisters. These family members were then contacted and invited to participate in the Family Similarity Study. A total of 1176 persons who were children or sisters/brothers of SLS study participants took part in this study. They included 776 adult children (65 daughters and 311 sons) and 400 siblings (248 sisters and 152 brothers). These family members took some of the same tests that had been given to the original SLS study participants.

We found that there is substantial family similarity of almost all mental abilities and for measures of flexibility. Similarities in mental abilities were found both for parents and their adult children, and for brothers and sisters. The proportion of ability shared between parents and adult children or between siblings was, on average, about 25%. There were two exceptions to these findings with respect to a the attitude measure of Social Responsibility and for a measure of perceptual speed; neither of these seem to display inherited characteristics. The magnitudes of the relationships found are similar to those observed when examining similarity of mental abilities in parents and young children. Our study shows that these similarities persist throughout adult life.

We have also conducted a seven-year follow-up of many of these family members to determine similarity in rate of change over age in two generations. The data suggest that the rate of aging slows for the younger generation.

The Seattle Longitudinal Study is supported by Research Grant R37 AG08055 from the National Institute on Aging. K. Warner Schaie, Principal Investigator; Sherry L. Willis, Co-Investigator.

RECENT SLS PUBLICATIONS IN THE SCIENTIFIC LITERATURE

Bosworth, H. B., & Schaie, K. W. (1999). Survival effects in cognitive function, cognitive style, and sociodemographic variables in the Seattle Longitudinal Study. *Experimental Aging Research*, 25, 121-139.

Bosworth, H. B., Schaie, K. W., & Willis, S. L. (1999). Cognitive and sociodemographic risk factors for mortality in the Seattle Longitudinal Study. *Journal of Gerontology: Psychological Sciences*, 54B, P273-P282.

Bosworth, H. B., Schaie, K. W., Willis, S. L., & Siegler, I. C. (1999). Age and distance to death in the Seattle Longitudinal Study. *Research on Aging*, 21, 723-738.

Kennett, J., McGuire, L., Willis, S. L., Schaie, K. W., & Caskie, G. (2000). Memorability functions in verbal memory: A longitudinal approach. *Experimental Aging Research*, 26, 121-137.

Maitland, S. B., Intrieri, R. C., Schaie, K. W., & Willis, S. L. (2000). Gender differences in cognitive abilities: Invariance of covariance and latent mean structure. *Aging, Neuropsychology & Cognition*, 7, 1-22.

Schaie, K. W. (1996). *Intellectual development in adulthood: The Seattle Longitudinal Study*. New York: Cambridge University Press.

Schaie, K. W. (2000). The impact of longitudinal studies on understanding development from young adulthood to old age. *International Journal of Behavioral Development*, 24, 267-275.

Willis, S. L., & Schaie, K. W. (1999). Intellectual functioning in midlife. In S. L. Willis & J. Reid (Eds.), *Life in the middle* (pp. 233-247). San Diego, CA: Academic Press.

HELP KEEP US UP TO DATE

If you have moved or changed your name please contact our office at 206-281-4050, write us at 180 Nickerson, Suite 206, Seattle, WA 98109, or e-mail us at slsnick@u.washington.edu