

On the occasion of the publication of articles by Professor K. Warner Schaie and Professor Sherry L. Willis

I am very pleased that two articles written by Professor Schaie and Professor Willis will be published in the Annual Report of Psychology, Meisei University in Japan. I appreciate that the editorial committee of the Department of Psychology in Meisei University has allowed these articles to be published. These articles were written as the manuscripts for the keynote lectures of the 20th annual meeting of Japan Society of Developmental Psychology (JSDP) in March 23, 2009. Prof. Schaie presented "Longitudinal Studies of Adult Development: Paradigm Shifts and Empirical Findings", and Professor Willis presented "Risk for Cognitive Decline in Old Age: Early Detection and Intervention Research." I was a host to invite both professors to Japan. This program was greatly successful and there were around 400 people in attendance in the lecture hall, Naruse Kinen Koudo, in Japan Women's University, Tokyo. These lectures were co-sponsored by Japan Women's University, Center of Developmental Education and Research (CODER), and the Japanese Organization of Clinical Developmental Psychologist.

I would like to introduce the primary research histories of two professors. Prof. Schaie has been conducting a longitudinal study on cognitive development in adulthood for more than 50 years. It is known as the Seattle Longitudinal Study. His initial finding was very impressive that while cross-sectional study showed the decline of cognitive ability from early adulthood, the longitudinal study showed that cognitive ability maintained until at least old age. It suggested the importance of longitudinal study in adult development. Prof. Schaie developed the most efficient research design by combining longitudinal-sequential design and cross-sectional sequential design. His research interests are not only on description of trajectories in cognitive ability, but also on many other aspects of adult development, for example, development of research methodology, explanatory analyses of cognitive decline, the relationship between personality and intelligence, and so on.

Prof. Willis has also been involving the Seattle Longitudinal Study with Professor Schaie. Her research interest, however, focuses more on practical aspects, such as intervention studies on the elderly to prevent or recover from cognitive decline. It is very important for us,

living in a modern society, especially in Japan, because Japanese people have one of the world's longest life-spans and most of us and our family members will be likely to suffer from such a cognitive decline in the near future.

I would like to tell the personal history about how I came to know the two professors. During my sabbatical leave in 2006, I translated their textbook, "Adult development and aging (5th ed.)" into Japanese, which was published from the Brain publisher in Japan in August 2006. Then, I studied for four months from September to December in 2006 at Pennsylvania State University where they had worked at that time. Since then, many things that I learned from the two professors have lead to my research orientation.

I would like to give all the persons who missed their excellent lectures the opportunity to know the contents, so I published the following articles. Hopefully through them people will understand the importance of studying adult development through empirical methods and also the importance of effective cooperation between the academic approach and the pragmatic approach. I hope these articles will become the momentum that is needed for research in adult development to be activated in Japan.

January 2010
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K. Warner Schaie

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Research Summary:

K. Warner Schaie is the Evan Pugh Professor Emeritus of Human Development and Psychology at the Pennsylvania State University. He also holds an appointment as Affiliate Professor of Psychiatry and Behavioral Sciences at the University of Washington. He received the Kleemeier Award for Distinguished Research Contributions from the Gerontological Society of America, the MENSA lifetime career award, and the Distinguished Scientific Contributions award from the American Psychological Association. He is author or editor of 54 books including the textbook *Adult Development and Aging* (5th edition, with S. L. Willis) and the *Handbook of the Psychology of Aging* (6th edition, with J. E. Birren). He has directed the Seattle Longitudinal Study of cognitive aging (<http://www.uwpsychiatry.org/sls/>) since 1956 and is the author of more than 275 journal articles and chapters on the psychology of aging. His current research interest is the life course of adult intelligence, its antecedents and modifiability, the early detection of risk for dementia, as well as methodological issues in the developmental and social sciences.

Primary Research Publications:

- Birren, J. E., & Schaie, K. W. (Eds.) (2006). *Handbook of the psychology of aging (6th ed.)*. San Diego, CA: Elsevier.
- Schaie, K. W. (1965). A general model for the study of developmental problems. *Psychological Bulletin*, 64, 92-107.
- Schaie, K. W. (1996). *Intellectual development in adulthood: The Seattle Longitudinal Study*. New York: Cambridge University Press.
- Schaie, K. W. (2005). *Developmental influences on adult intellectual development: The Seattle Longitudinal Study*. New York: Oxford University Press.
- Schaie, K. W. (2008). Historical processes and patterns of cognitive aging, In S. M. Hofer & D.F. Alwin (Eds.), *Handbook on cognitive aging: Interdisciplinary perspective* (pp. 368-383). Thousand Oaks, CA: Sage
- Schaie, K. W., Caskie, G. I. L., Revell, A. J., Willis, S. L., Kaszniak, A. W., & Teri, L. (2005). Extending neuropsychological assessment into the Primary Mental Ability space. *Aging, Neuropsychology and Cognition*, 12, 1-33.

- Schaie, K. W., & Labouvie-Vief, G. (1974). Components of change in adult cognitive behavior: A fourteen-year cross-sequential study. *Developmental Psychology*, 10, 305-320.
- Schaie, K. W., & Parham, I. A. (1976). Stability of adult personality traits: Fact or fable? *Journal of Personality and Social Psychology*, 34, 146-158.
- Schaie, K. W., Plomin, R., Willis, S. L., Gruber-Baldini, A., & Dutta, R. (1992). Natural cohorts: Family similarity in adult cognition. In T. Sonderegger (Ed.), *Psychology and aging: Nebraska symposium on motivation*, 1991 (pp. 205-243). Lincoln, NE: University of Nebraska Press.
- Schaie, K. W., & Willis, S. L. (1986). Can decline in adult intellectual functioning be reversed? *Developmental Psychology*, 22, 223-232.
- Schaie, K. W., & Willis, S. L. (2000). A stage theory model of adult cognitive development revisited. In B. Rubinstein, M. Moss, & M. Kleban (Eds.), *The many dimensions of aging: Essays in honor of M. Powell Lawton* (pp. 175-193). New York: Springer.
- Schaie, K. W., & Willis, S. L. (2002). *Adult development and aging (5th ed.)*. New York: Prentice-Hall.
- Schaie, K. W., Willis, S. L., & Caskie, G. I. L. (2004). The Seattle Longitudinal Study: Relation between personality and cognition. *Aging, Neuropsychology and Cognition*, 11, 204-234.
- Schaie, K. W., Willis, S. L., & Pennak, S. (2005). A historical framework for cohort differences in intelligence. *Research in Human Development*, 2, 43-67.

Sherry L. Willis

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Research Summary:

Sherry Willis is a Research Professor, Department of Psychiatry and Behavioral Sciences, University of Washington. She is the co-director with Dr. K. Warner Schaie of the Seattle Longitudinal Study (SLS) <http://www.uwpsychiatry.org/sls/>. Dr. Willis' long-term research interests are on lifespan cognitive development, with primary emphasis on the periods of midlife and aging. Her current research focuses on midlife change in cognition and in brain as predictors of cognitive and brain functioning in old age. Structural MRIs are being conducted on a subset of SLS participants to study the association of brain and cognition. The study examines both cognitive risk with aging and also cognitive reserve and plasticity.

Dr. Willis is a PI on the Adult Cognitive Training in Vital Elderly (ACTIVE) clinical trial. ACTIVE is a large NIH-funded trial examining the effects of behavioral cognitive intervention on maintenance and enhancement of cognitive and everyday functioning in old age. Prior to the ACTIVE trial, Dr. Willis was involved in cognitive intervention studies within the SLS and in the ADEPT study. In addition, she has conducted a program of research examining the relation of cognition to everyday functioning in adulthood and has developed several measures of everyday functioning for use with older adults.

Primary Research Publications:

- Ball, K., Berch, D. B., Helmers, K. F., Jobe, J. B., Leveck, M.D., Marsiske, M., Morris, J. N., Rebok, G. W., Smith, D. M., Tennstedt, S. L., Unverzaat, F. W., & Willis, S. L. (2002). Effects of cognitive training interventions with older adults. *Journal of American Medical Association. JAMA, Vol 288, No 18, 2271-2281.*
- Kramer, A. F. & Willis, S. L. (2003). Cognitive plasticity and aging. In B. Ross (Ed). *The Psychology of Learning and Motivation, Vol 43:* (pp. 267-302). New York: Academic Press.
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- Schaie, K. W., & Willis, S. L. (1999). Theories of everyday competence and aging. In V.L. Bengtson & K.W.Schaie (Eds.), *Handbook of theories of aging* (pp.174-195). New York: Springer.
- Schaie, K. W., Willis, S. L. & Pennak, S. (2005). A historical framework for cohort differences in intelligence. *Research in Human Development, 2,* 43-67.
- Whitbourne, S. & Willis, S. L. (Eds.) (2006). *The Baby Boomers grow up.* New York: Erlbaum.
- Willis, S.L. (1991). Cognition and Everyday competence. In K. W. Schaie (Ed.), *Annual Review of Gerontology and Geriatrics, Vol. 11* (pp. 80-109). New York: Springer.
- Willis, S.L. (1996). Everyday cognitive competence in elderly persons: Conceptual issues and empirical findings. *Gerontologist, 36,* 595-601.
- Willis, S. L. (2001). Methodological issues in behavioral intervention research with the elderly. In J.E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging, 5th ed.* (pp. 78-108). San Diego, CA: Academic Press.
- Willis, S. L. & Martin, M. (Eds.) (2005). *Middle Adulthood: A Lifespan Perspective.* Thousand Oaks: Sage.
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- Willis, S. L., & Schaie, K. W. (1986). Training the elderly on the ability factors of spatial orientation and inductive reasoning. *Psychology and Aging, 1,* 239-247.
- Willis, S. L., & Schaie, K. W. (1988). Gender differences in spatial ability in old age: Longitudinal and intervention findings. *Sex Roles, 13,* 189-203.
- Willis, S.L., & Schaie, K.W. (2006). A co-constructionist view of the third age: The case of cognition. *Annual Review of Gerontology and Geriatrics, 26,* 131-152.
- Willis, S. L., Schaie, K. W., & Martin. M. (2009). Cognitive plasticity. In V. Bengtson, M. Silverstein, N. Putney & D. Gans (Eds.), *Handbook of theories of aging* (2nd ed., pp. 295-322),. New York: Springer Publishing Co.

