



Victoria Longitudinal Study

Edmonton • Victoria
Canada



VLS Newsletter

Issue 3: 2008-2009

Welcome to the VLS Newsletter

The VLS Newsletter is directed to readers near and far. The VLS continues to grow and expand in its research agenda and purview, while remaining a part of the lives of its many staff, alumni, and participants. We had a very favourable response to our earlier newsletters (Issue 1: 2004-2005; Issue 2: 2006-2007), so we are delighted to prepare the current edition in the same format and style. Please let us know what you think of the newsletter. Our contact information is on page 4. We would like to extend a very special greeting to those readers who are VLS participants: To you we express how deeply grateful we are for your continuing dedication to this project. We are doing our best to honour your contribution by conducting and publishing our very best research on human development and aging. We would also like to thank both sponsoring universities for their continued support. The crests for the Universities of Alberta and Victoria are featured in the banner above.

Dr. Roger A. Dixon

VLS Director

Canada Research Chair in Cognition and Aging (University of Alberta)

Professor of Psychology (University of Alberta)

Adjunct Professor of Psychology (University of Victoria)



New Research From the VLS: Remembering “The Way We Were”

Research on aging is the main purpose of the VLS. In each issue of the VLS Newsletter, we highlight some actual research projects conducted with the ever-growing VLS database. In this edition, Dr. David Hultsch summarizes one recent project.

In the VLS, we track how groups of adults change over time in their performance on various cognitive tasks. How do our participants *believe* they have changed over time? Do their beliefs about their own past memory changes match their actual record of memory performances? In other words, how well do we recall “the way we were”?

Other researchers have shown that older adults are likely to say that their memory used to be much better when they were younger. Some theorists have suggested recall of past personal attributes (such as memory) involves two major elements. First, individuals may consider their beliefs about their present memory status, perhaps incorporating recent experiences of memory failures. Second, individuals may consider general beliefs about whether memory is stable or changes with aging. Theoretically, if mature adults have recently experienced a memory failure (forgetting a name) and believe that memory typically declines with aging, they may construct a likely scenario that their memory was much better when they were younger.

A few years ago, former VLS graduate student Carolyn Crow did a preliminary investigation of this question for her Master’s thesis. Recently, a VLS team reanalyzed her study when we were invited to present a talk at a *festschrift* honoring noted gerontologist Professor Warner Schaie. We chose this topic because an earlier paper published by Prof. Schaie had inspired

us to collect the relevant information as part of the VLS. Among the many tasks in the VLS, there are three that assess recall of words, facts, and stories. At one point, we also asked our participants to estimate how many words, facts, and story ideas they remembered on the task they had just completed, and to estimate the number of items they had recalled on those same tasks 3, 6, and 9 years earlier. By matching their beliefs about how much they had remembered over the previous nine years with their actual performance over that same period, we could estimate how well they recalled the way they were.

This long-term recollection of specific past memory performances is a very difficult task. Our participants were relatively accurate at estimating their performance immediately after they had completed each memory task. However, as expected, they were less accurate at reconstructing their performances over the previous 9 years. In fact, they consistently overestimated how well they had performed when they were younger. In other words, they seemed to believe that they had declined more in their memory skills over the past nine years than they actually had.

The results of this study are consistent with the theory that adults may invoke recent memory experiences and general memory decline beliefs when reconstructing their past. This pattern may lead us to remember ourselves as being better than we actually were (thereby overestimating the negative effect of aging on memory).

Citation: Hultsch, D.F., Bielak, A.A.M., Crow, C.B., & Dixon, R.A. (2009). The way we were: Perceptions of past memory change in older adults. In H.B. Bosworth & C. Hertzog (Eds.), *Cognition in aging: Methodologies and applications* (pp. 197-216). Washington, DC: American Psychological Association.

At 21: The VLS Comes of Age!

The Victoria Longitudinal Study recently celebrated its 21st birthday. In human lifetime terms such an achievement would qualify the VLS as a young adult. However, in the context of ongoing human research projects achieving the age of 21 signifies a long life and (already) successful aging. As befits a study of human aging, we thought it would be interesting to review a few historical highlights of the VLS.

VLS Founding: The VLS was founded in the late 1980s by three main co-investigators, **Drs. Roger A. Dixon, Christopher Hertzog, and David F. Hultsch**. The three friends would meet regularly in Victoria, where **Drs. Dixon and Hultsch** were professors, to design, plan, execute, and report new VLS research. We all remember fondly the early collaborative energy generated by this innovative research project.

VLS Leadership: Two of the founders have served as overall VLS leader. **Dr. Hultsch** was the first “principal investiga-

tor” of the VLS and played a leadership role in organizing the first two VLS Samples. VLS Sample 1 began in the late 1980s and VLS Sample 2 began in the early 1990s. We are fortunate that many members of these initial groups of participants are still volunteering to participate in the study. In about 1995, **Dr. Dixon** became the second “principal investigator” of the VLS, and has remained VLS director for the last 14 years. Under **Dr. Dixon’s** leadership, the VLS has begun Sample 3 (in the early 2000s), expanded and refined the protocol, and enhanced the roster of collaborators. Although the headquarters of the VLS moved with Dr. Dixon to the University of Alberta in 2002, the lab at UVic has continued to serve us well as a major point of contact with all our mature participants.

VLS People (Participants): Remarkably, we continue to follow the basic research design set out in the late 1980s. We have three valued

groups of participants from three different decades, and we invite all of our participants to return regularly, every three years. Since the first participant, we have hosted over 2000 volunteers at least once.

VLS People (Staff): Over the years, we have had an amazing group of research staff, graduate students, postdoctoral associates, and collaborators. Among the current staff, the following dedicated and skilled professionals have served with the VLS for over five years each: **Debbie Ball** (13 years), **Jill Friesen** (6 years), **Jackie Lane** (8 years), **Terry Perkins** (13 years), and **Dianne Wolcott** (12 years). The VLS is grateful to all of its experienced and enthusiastic staff over the last 21 years.

Special Gratitude: As we reflect on the past, we would be remiss not to acknowledge the continuous funding from the National Institutes of Health, and especially the **National Institute on Aging**. **Roger Dixon** is the Principal Investigator for the NIA grant (R37 AG008235) supporting the VLS and both labs (Edmonton, Victoria).

The VLS at the Recent Cognitive Aging Conferences

As the VLS turned 21 years old, a prominent series of conferences on cognitive aging celebrated its 20th anniversary. Since the late 1980s, the Cognitive Aging Conferences have been held bi-annually in Atlanta, Georgia. In the last two years, two conferences were held, one an international meeting in August 2007 (in Adelaide, Australia) and the other in April 2008 (in Atlanta, Georgia). The VLS has always been well-represented at these meetings. One highlight of the 2007 Adelaide conference (in addition to the spectacular setting in a beautiful city), was the tongue-in-cheek Longevity Award, given to those few individuals who have attended and presented research at every Cognitive Aging Conference. Two VLS founders, Roger Dixon and Christopher Hertzog, proudly received these honorific (and humorous) certificates!

For the spring 2008 Atlanta meeting, a VLS reunion dinner at the Atlanta Fish Market was attended by Allison Bielak, Cindy de Frias, Roger Dixon, Ashley Fischer, Doug Garrett, Christopher Hertzog, David Hultsch, Stuart MacDonald, Ann Pearman, Kerri Rawson, Brent Small, and Sophie Yeung. All are shown in the photo.



The following papers were presented at these recent conferences.

Roger A. Dixon. *An Epidemiological Approach to Cognitive Health in Aging: Illustrations from the Victoria Longitudinal Study.* (Invited Address, August 2007)

Stuart W.S. MacDonald. *Overview of Intraindividual Variability in Cognitive and Neurocognitive Aging.* (Invited Overview Paper, April 2008)

Cindy de Frias, Roger A. Dixon, and Esther Strauss. *Executive Functioning in Special Populations: From Cognitively Elite to Cognitively Impaired.*

Brent J. Small, Roger A. Dixon, John J. McArdle, and Kevin J. Grimm. *Changes in Lifestyle Activities in Relation to Changes in Cognitive Abilities: 12-year Data from the Victoria Longitudinal Study.*

Sophie E. Yeung, Ashley L. Fischer, and Roger A. Dixon. *Exploring Effects of Type 2 Diabetes on Cognitive Performance in Older Adults.*

Transitions

Dr. Allison Bielak received her Ph.D. in 2008 and is now a postdoctoral fellow in a similar project at Australian National University in Canberra.



Dr. Anna-Lisa Cohen, who received her Ph.D. in 2002, is Assistant Professor of Psychology at Yeshiva University in New York City.

Dr. Cindy M. de Frias (Ph.D., 2003) is Assistant Professor of Psychology at Stockholm University in Sweden.

Douglas Garrett received an M.Sc. degree at the University of Toronto where he continues studies in cognitive neuroscience and aging.

Dr. Tiffany Hughes received her Ph.D. in Aging Studies, as well as her M.P.H. in Epidemiology and Biostatistics, in August 2008. Her supervisor was Brent Small. She is now a post-doctoral research scientist in the College of Medicine at the University of Pittsburgh.

Dr. Stuart MacDonald, who received his Ph.D. in 2003, has recently returned to his alma mater as Assistant Professor of Psychology at UVic.

Peggy McFall completed her M.Sc. degree at the University of Alberta. She is currently working as a doctoral student in the VLS lab conducting research on diabetes and aging.

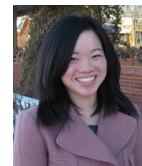


Dr. Brent J. Small was recently promoted to Professor in the Department of Aging Studies at the University of South Florida, where he has been on the faculty since 1997.

Dr. Åke Wahlin, long-time collaborator with VLS, was promoted to Professor and Head of the Department of Psychology at Stockholm University.



Both **Sophie Yeung** and **Ashley Fischer** completed their B.Sc. degrees in Psychology at the University of Alberta. They published two research articles in prominent journals (*Neuropsychology* and *Journal of Clinical and Experimental Neuropsychology*). They are now in a graduate program in clinical neuropsychology (specializing in aging) at Simon Fraser University, Burnaby.



Wedding Bells: Several weddings highlighted VLS transitions. **Jill Friesen** was married in June 2008 in Edmonton.

Douglas Garrett was married in July 2008 in Canmore, Alberta. **Dianne Wolcott** was married in August 2007 in Russia. **Dianne** also participated in a Charity Walk for MS and raised \$962.00 with the generous support of friends and family.

Awards

Dr. Allison Bielak's research article, "It's never too late to engage in lifestyle activities: Significant concurrent but not change relationships between lifestyle activities and cognitive speed", received the Canadian Institutes of Health Research (Institute on Aging) award for outstanding student research. The article was published in the prominent journal, *Journal of Gerontology: Psychological Sciences*.

Dr. Roger Dixon received the NIH MERIT Award for the NIH grant that funds the VLS. The award is for the 2007-2012 period.

Dr. Sanda Dolcos was awarded a postdoctoral fellowship to conduct research in the VLS (Edmonton). Her research is in cognitive neuroscience, health, and aging.



Dr. David Hultsch received the 2008 Distinguished Research Achievement Award from Division 20 of the American Psychological Association and the Margaret M. and Paul B. Baltes Foundation. In August 2009, Dr. Hultsch gives an invited address at the APA convention in Toronto.

Dr. Stuart MacDonald received a Scholar Award from the Michael Smith Foundation for Health Research. His research program is entitled "Cognitive decline through normal aging to dementia and death: Identifying early risk factors and targeting effective interventions."

Peggy McFall received the Queen Elizabeth II Graduate Scholarship (doctoral level) from the University of Alberta (Winter term 2009).

VLS in the News

An article on diabetes and cognition published in *Neuropsychology* (2009) by VLS authors Sophie Yeung, Ashley Fischer, and Roger Dixon, generated an exciting whirlwind of international press attention. Literally hundreds of newspapers, websites, radio programs, and television newscasts reported on the important VLS findings. Among those well-known media outlets covering the story were Times of London, USA Today, Time magazine, Reuters, WebMD, and all Canwest newspapers (including the Edmonton Journal, Vancouver Sun, and Victoria Times-Colonist!)



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Editors: Jill Friesen

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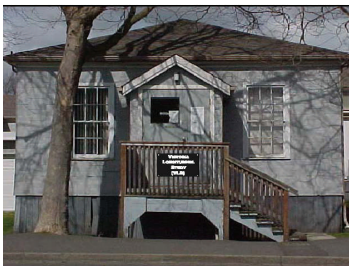


Roger Dixon, Stuart MacDonald, and David Hultsch meet regularly in Edmonton and Victoria to plan new VLS initiatives and to work on research reports.

WE'RE ON THE WEB!

www.ualberta.ca/~vlslab/

A Change in VLS Venue in Victoria



Because of changes on the UVic campus, the VLS lab in LHut will soon be moved. We do not yet know exactly where we will go or when this will happen.

For all ongoing participants in our study, we will inform you personally of the details as soon as possible.

VLS New Directions: Genes

The Victoria Longitudinal Study (VLS) is a large-scale and dynamic investigation of human aging. The VLS began modestly in the 1980s at the University of Victoria. In 2002, the headquarters of the VLS moved to the University of Alberta. Today, VLS labs operate on both campuses, and collaborators are distributed across North America and Europe.

The initial goal of the VLS was to examine profiles and predictors of cognitive changes in healthy middle-aged and older adults. The ambitious research design called for a series of three large samples of adults (initially ranging in age from 55 to 85 years) to be repeatedly interviewed and tested over a long period of time.

Saliva for Science

The VLS has grown dramatically in recent years. The latest initiative reflects the goal of further understanding interrelated aspects of human aging. As we distribute this newsletter, we are beginning an exciting new initiative that supplements the VLS. Specifically, we are in the process of inviting all of our VLS participants to volunteer for a new small study that will help us examine potential genetic markers of cognitive health and cognitive changes in mature adults.

The purpose of this new supplemental study is to find out if mature memory and cognition are related to certain genetic characteristics. Other researchers exploring this topic have found some promising linkages between some genetic characteristics and cognitive performance in mature adults. The unique objective of the new VLS study is to examine genetic influences on actual changes in cognitive health across a period of years.

Some genes can also give us some information on cognitive decline or impairment. We will be investigating these genes as well, as they might help us identify early predictors of cognitive decline. If so, this new information would help current and future generations of mature adults to age as successfully as possible.

We are using the latest technology for this fully approved, safe, and confidential study. We will ask only for a small sample of saliva on a single visit. We are happy to report that, so far, VLS participants have found that it takes only 10-15 minutes to provide the saliva sample.

HELP KEEP US UP-TO-DATE

If you have moved or changed your name or phone number, please contact one of our offices.

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