



Memory lapse: Should you worry?

Project MIND examines possible link to future neurological disorders

By **Patty Pitts**

They're the bane of baby boomers—those frustrating, momentary memory lapses when a normally sharp, agile mind goes suddenly blank. Although people of a certain age try to laugh off the mental black holes as pesky “seniors’ moments,” what do these moments actually mean when they happen to seniors? Are memory lapses nothing more than a fleeting neurological glitch or are they indicative of a much more serious condition?

Studying the significance of inconsistent memory has dominated the recent research of UVic psychologists David Hultsch, Esther Strauss and Michael Hunter. For nearly four years the trio has conducted studies as part of Project MIND, their on-going research into “the ups and downs of mental functioning.”

“We all know that some days we’re sharper than others and that could be due to any number of things,” says Hultsch. “Most of the time, these ups and downs don’t make a difference, but when something like a compensation claim or the determination of competency hinges on an individual’s mental ability, any inconsistency can have a major impact.”

It was such an evaluation that led to the creation of Project MIND. Strauss had conducted an evaluation on a man that led her to believe that he was functioning at normal capacity. Another psychologist’s evaluation was more consistent with the effects of a head injury.

Strauss found very little research to explain the gulf between the two evaluations but did discover work on mental inconsistency completed by Hultsch and other colleagues, and a partnership was born.

The researchers asked people to perform physical and mental functioning tests (such as memory or balance exercises) repeatedly over periods of days and weeks, noting the peaks and valleys of an

individual’s performance. In the initial studies, the investigators were interested in whether inconsistency was a marker of neurological disorder. They contrasted healthy elderly adults with those in the early stages of dementia and those suffering from a non-neurological disease such as arthritis.

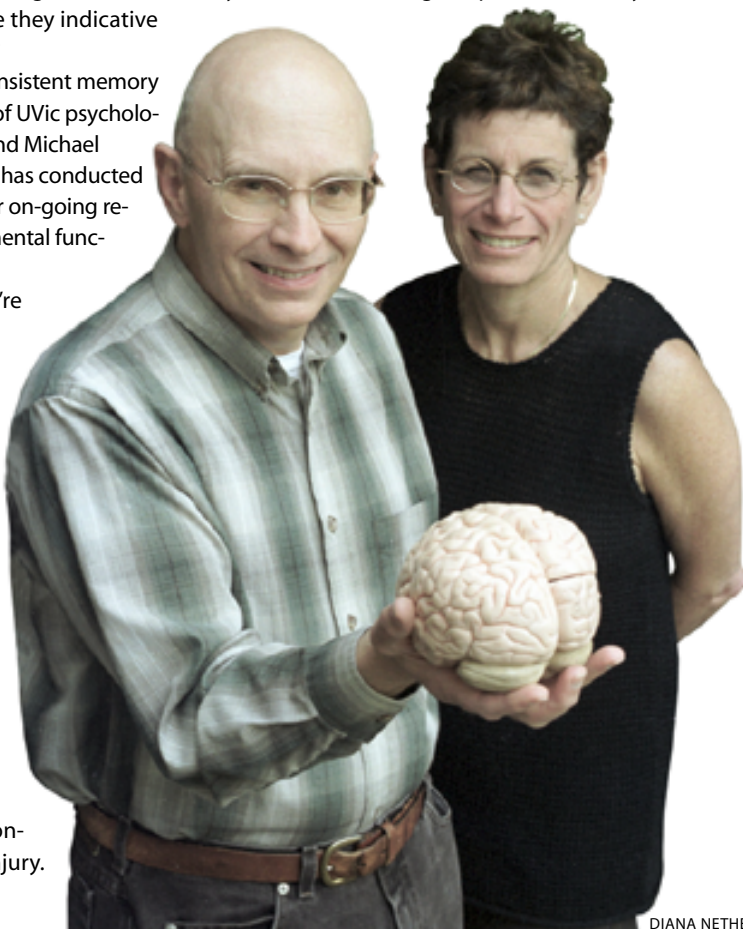
“The participants with dementia were more inconsistent than both the arthritis group and the healthy group,” says Hultsch. “That seems to indicate a link between inconsistency and a neurological disorder.” Further, comparative testing of people with chronic fatigue syndrome also suggested a link between that disease and inconsistent mental performance.

“Now that we have a sense of when inconsistency occurs, we want to take healthy individuals and find out if those who are more prone to inconsistent mental and physical performance are more likely to develop neurological problems in the future,” says Strauss.

That will require a longitudinal study. Earlier this year the Canadian Institutes of Health Research awarded Hultsch, Strauss and Hunter more than \$370,000 to spend five years testing and following healthy seniors — to learn if inconsistency in performance over short intervals is an early indicator of future mental decline.

“Establishing a more accurate link between early inconsistency and future neurological disorders is important because there’s increasing indication that various kinds of treatments can at least forestall the effects of these disorders,” says Hultsch. “Being able to determine early whether someone has a problem or not is potentially very important.”

Hultsch and Strauss



DIANA NETHERCOTT PHOTO

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- The Project MIND Web site provides an overview of the project and a link to Dr. Strauss’ personal Web site. web.uvic.ca/psyc/strauss/mins.htm
- The Web site of the Maryland-based National Institute of Neurological Disorders and Strokes is a great repository of research and clinical trial updates on various disorders including autism and Parkinson’s disease. www.ninds.nih.gov/
- The Web site of the Alzheimer’s Society of Canada offers research updates, the latest information on drug therapies and related conferences and workshops being held across Canada. www.alzheimer.ca/

facts from the **EDGE**

- Project MIND engages more than faculty members — three psychology graduate students will be put to work analyzing data from the project and will assist in writing reports about the study’s outcomes.
- Both Strauss and Hultsch discuss their current research as part of their regular classes. Hultsch’s psychology classes deal with normal aging in individuals while Strauss teaches neuropsychology — the study of brain-behaviour relationships.

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PUBLIC EVENTS AT UVIC

From the Heart: A Relational Approach to Resolving Conflict

A free public lecture by Michelle LeBaron, George Mason University, Virginia

June 12, 12:30–2 p.m., Human & Social Development Bldg., room A240. Presented by the UVic Institute for Dispute Resolution. Info: 721-8777

Gravitational Waves: A New Window onto the Universe

Inaugural Herzberg Memorial Lecture by Kip Thorne, Caltech

June 17, 7 p.m., University Centre Farquhar Auditorium. Sponsored by the Canadian Association of Physicists. Info: 721-7700

EDGEwise Wanted: 400 healthy seniors willing to put their minds to the test

To better understand if memory inconsistency among healthy seniors is an indication of more serious neurological problems in the future, Drs. David Hultsch, Esther Strauss and Michael Hunter need volunteers—lots of them—willing to play some periodic mind games over the next four years.

To form a research group of 200 people, the re-

searchers need to choose from a pool of 400 volunteers who are 65 or older and living independently.

The researchers will visit the volunteers in their homes for two-hour sessions every two weeks over two months. During these visits, the volunteers will be asked to perform memory tests such as recalling stories or lists of words, performing exercises that

record reaction times to simple signals, and completing some noninvasive physical tests such as blood pressure. Each year the five bi-weekly visits will be repeated. Volunteers will be invited to participate over four years to track how people change.

This project will help researchers gain valuable insight into the characteristics of mental inconsis-

ency among older people and whether it can predict future problems. The participation of today’s seniors in this study could have a major impact on future seniors.

For further information about being a volunteer with Project MIND, please call 721-7549 or e-mail mindlab@uvic.ca

