



Aging Research News



THE OFFICIAL NEWSLETTER FOR RESEARCH VOLUNTEERS OF THE ADULT VOLUNTEER POOL

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF TORONTO

SPRING - SUMMER 2019

28TH EDITION

Thank you to all of our research volunteers!

We would like to extend our thanks to all of our volunteers and to share with you some information about the studies you may have recently participated in. Since our humble beginnings at the start of the century, the Adult Volunteer Pool volunteer program has now grown to include over 5000 active volunteers who have participated in close to 400 different studies. Your time and commitment has been an invaluable contribution to the progress of our research.

Over the past several years, our research has focused on various aspects of cognition (e.g., memory, learning), social attitudes, and more recently, neuropsychology as people grow older. On many occasions, you have asked us about our research and the results that we have obtained. While it has often been too early for us to answer those questions definitively, we have tried to summarize some of our results in this newsletter (see reverse). We hope that this newsletter will provide you with a better understanding of our research and our department's contribution to the field of psychology, and that you will find it to be as interesting as we do.

We are continuously looking for new volunteers to participate. If you have any friends or family between the ages of 50 and 80 who would be interested in becoming research volunteers, please have them contact us. Please also call us if you have recently moved, changed phone numbers, or believe your personal information has changed. Once again, we would like to thank you and hope you enjoy this edition of our newsletter.

Directions to the Psychology Department

- To 100 St. George St. from the St. George subway station:

Exit through the St. George St. exit (not the Bedford Rd. exit). Turn left and walk south on St. George St. past Bloor St. and Harbord St. The building will be on your right.

Aging Research News is designed to keep our volunteers up to date on news and research at the University of Toronto. Questions or comments can be addressed to:

Department of Psychology
c/o Adult Volunteer Pool
University of Toronto
100 St. George Street, Room 4020
Toronto, ON, M5S 3G3

Tel: (416) 978-0905

E-mail: adultpool@psych.utoronto.ca

Web: www.psych.utoronto.ca/users/adultpool

FACULTY PROFILE

Dr. Fergus Craik: Attention and Memory Laboratory



One particularly irritating feature of getting older is the failure to recall information – often names! – that we know perfectly well. The information is still clearly in our memory store but we are often unable to retrieve it on demand. In a study published last year with Eldar Eftekhari, Ellen Bialystok and Nicole Anderson we explored the possibility that failures to retrieve facts had aspects in common with failures to recall recent episodic events; we suggested that both types of memory problem may stem from the growing inefficiency of ‘executive functions’ mediated by frontal lobes of the brain.

We tested groups of 50 volunteers in their 60s in two experiments. Participants were given three measures of attentional control to yield a composite estimate of their executive function ability; participants were also given tests of memory retrieval for both recent events and factual knowledge. In all cases we calculated an index of each person’s ‘retrieval efficacy’ by first asking them to recall some information and then giving them a multiple-choice recognition test for the same information. This taps into the general experience of being unable to recall a name that we know but can readily select the correct response from a set of alternative answers. In our case the measure of retrieval efficacy was simply the proportion of correctly recognised items that the person had correctly recalled in the previous test.

We found that the composite measure of executive function did correlate with retrieval efficacy for both recent events and general knowledge, but that the pattern of relations also depended on the specific tasks used to measure each ability. The bottom line is that as the efficiency of our frontal lobes declines in the course of healthy aging, one consequence of impaired attentional control is the inability to recall information that we know perfectly well. The remedy? The best we can offer at present is to keep actively engaged in all aspects of life – mentally, physically and socially.

Do you have any feedback on your experience with us today?

If you have any questions or concerns about your participation in today’s experiment, please contact the Adult Volunteer Pool by phone or email (see front), or visit our website at

www.psych.utoronto.ca/users/adultpool

