

VIRGINIA COGNITIVE AGING PROJECT

University of Virginia

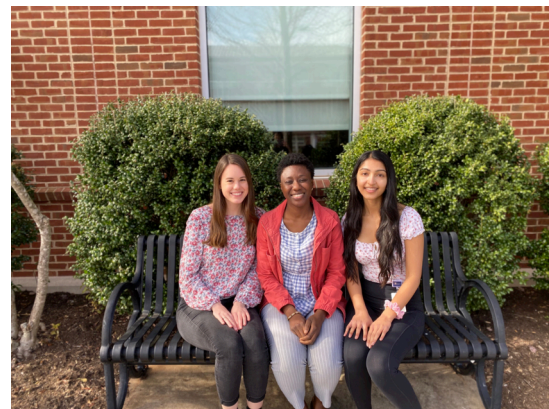
Spring 2020

The Cognitive Aging Lab would like to wish [Dr. Salthouse a happy retirement!](#) As one of the most important pioneers in the cognitive aging field, Dr. Salthouse dedicated his career to investigating the biggest questions regarding age-related changes in cognition and how they might best be answered: What is the trajectory of cognitive aging? How can normal and pathological cognitive aging be distinguished as early as possible? What are the correlates of cognitive changes?



Dr. Salthouse retired in August of 2019, but his research will be honored by a new team of investigators who will continue the Virginia Cognitive Aging Project (VCAP) core and expand it into new sub-projects. We count on the continued support of the VCAP participants!

The long-term research conducted by Dr. Salthouse has expanded into many different contexts, greatly impacting the study of human development and helping society build a more accurate perspective on aging. With a remarkable number of publications (394 papers, 10 books, and more than fifty thousand citations), Dr. Salthouse is recognized worldwide as one of the most brilliant researchers in his field. Under the direction of Dr. Salthouse, the [Virginia Cognitive Aging Project started in 2001 and has collected longitudinal data from the same group of individuals since 2004](#) in order to better understand the aging process.



Research Assistants: Kaylyn W. and Joya B. & Project Coordinator: Afia A.

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Happy Spring from the Cognitive Aging Lab!

Thank you for your participation!



The Virginia Cognitive Aging Project is currently [one of the largest longitudinal studies focusing on age differences in cognitive functioning in the world](#). We would not be able to conduct this research without your continued support and participation. We hope you find the information in this newsletter interesting and that you enjoy reading what we have found thus far! [Visit our webpage mentalaging.com and take a look in the lab publications!](#)

What lays ahead!

After 19 years of an extremely judicious research study conducted by Dr. Salthouse, the legacy of the Virginia Cognitive Aging Project has transitioned to a multi-principal investigators group. [A new data collection following the same line of investigation with returners and new participants is planned to start in Fall 2020, or as soon as we have resumed our normal activities due to the COVID-19 pandemic.](#) In this new data collection, the participants will perform a shorter cognitive assessment session, more computerized tasks and the addition of a clinical screening.

The participants of this next data collection may expect the same careful approach from the prior years, with a team of project coordinators and research assistants ready to receive them as kindly as used to: the recruitment will be performed by email or phone call and the session scheduled by the most convenient date at the same location: 1023 Millmont Street, Charlottesville, VA. You will be compensated for your time.

Updates to the Project!

In 2017 a subgroup of participants from the Virginia Cognitive Aging Project was invited to a new study using the functional Magnetic Resonance Imaging (fMRI) technology to investigate the structural and functional brain correlates of cognitive aging. The second wave of this project started in November of 2019. We invited the same group of participants to a cognitive and clinical assessment, an fMRI session, as well as the collection of a blood sample. If you participate in the study, you would be asked to complete the clinical and cognitive assessment, as well as the blood draw in a first session for approximately 2.5 hours. Afterwards, a second visit of approximately 1 hour is scheduled for the fMRI scan and a computer cognitive battery task. Sessions can usually be accommodated to your schedule, and you will be compensated \$100 for your time!

Hot Topic: Is it possible to prevent cognitive decline?

In 1983, B.F Skinner, the patriarch of behavioral psychology, published his "Intellectual self-management in old age", a first-person report of how to cope with the failing memory and the general diminished cognitive functioning in old age. Among the many tips and strategies that he adopted to compensate the loss in some mental abilities, he concluded that the secret lies in creating a stimulating environment, learning memory tricks, and giving the brain time to rest between intellectual exertions. Have these recommendations been validated since then? The field of cognitive aging has accumulated evidences from important studies that aim to investigate two intriguing questions: When does the cognitive decline begin? Is it possible to prevent it? According to the robust set of evidences from the Virginia Cognitive Aging Project (VCAP), Timothy Salthouse (2019) observed that a slight decline is observed in the normal trajectory of cognitive aging since the early adulthood for abilities such as memory, reasoning and our capacity to think fast. On the other hand, other domains related to our ability to accumulate knowledge and language skills may increase until about 60 age. This pattern of results from the VCAP study has been corroborated by many other longitudinal studies leading to the conclusion that the age-related cognitive change for healthy adults is expected to be variable and not fully negative for cognitive tasks administered in the laboratory context, with a more pronounced practical consequences for older adults. Since this pattern of change has been established, new questions about how to prevent or reverse it has arisen: what an individual might do to minimize some negative consequences of the cognitive decline? Are the daily activities, physical exercise, health, education, cognitive training (and many others) protective factors? The current findings are more intriguing than they are definitive. In the absence of conclusive evidence, only tentative recommendations can be offered. Some relevant findings point out that two daily habits should not be neglected: physical exercise and the engagement in mentally stimulating activities. There is an important literature suggesting that physical exercise - in particular aerobic exercise - when practiced regularly, enhances older adult's cognitive function. A group of researchers has also encouraged the engagement cognitively challenging activities. Although the type of mentally stimulating activity can greatly vary among the individuals, learning new things, reading and play mental games (like chess and cross-puzzles) are frequently reported activities. The positive association between these two habits and our cognitive functioning is stronger when the individual begin the engagement as earlier as possible in his life.

References:

- Hertzog, C., Kramer, A. F., Wilson, R. S., & Lindenberger, U. (2008). Enrichment effects on adult cognitive development: can the functional capacity of older adults be preserved and enhanced?. *Psychological science in the public interest*, 9(1), 1-65.
- Salthouse, T. A. (2019). Trajectories of normal cognitive aging. *Psychology and aging*, 34(1), 17.
- Skinner, B. F. (1983). Intellectual self-management in old age. *American Psychologist*, 38(3), 239.

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Meet our New Investigators!



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COVID-19/ Coronavirus Emergency Response

Dear Cognitive Aging Participant,

Thank you for your commitment to participating in our study. As we are all aware, we are going through perilous times and this has greatly impacted our current project as we are working with high risk subgroup.

Early last month, The President of The University of Virginia, Jim Ryan announced that the university will be moving their in-person courses online to prevent the spread of the novel coronavirus in our community and this action had an immediate impact on our research routine.

Aligned with this new policy and in order to guarantee your safety, we have temporarily suspended all our sessions. Please understand that this is not a cancellation but a temporary suspension of the neuropsychological assessment and/or the MRI sessions.

Visits will be scheduled as soon as we have resumed our regular activities. This is an undesirable change of plans on our project and we apologize for any inconvenience that it may have caused you. Our office and team will keep working regularly to ensure smooth operation. We are glad to address any issues or questions that you may have. Please contact us via email at cogage@gmail.com.

For more information, about COV-19, please visit [this website](#) for the updates. We count on your understanding that these actions are being implemented to guarantee the safety and health of our participants, employees and community.

Sincerely,

VCAP team