

Virginia Cognitive Aging Project

The Virginia Cognitive Aging Project is currently one of the largest longitudinal studies focusing on age differences in cognitive functioning in the world. Our research would not be possible without your continued support and participation. Here are some interesting findings from the data we have collected. We hope you will enjoy reading about what we've learned from your participation!

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How are you TODAY?

How you feel today may be associated with more than you think!



You may remember that in each of your three sessions we asked you to complete a questionnaire that asked how you were feeling that day. The questionnaire asked questions such as “I feel pleasant”, “I feel inadequate”, “I am content”, etc. Previous research shows that there are considerable differences in a person’s mood and affect over different occasions (in this case three different sessions). The magnitude of this variability has been linked to characteristics such as self-reported health, some aspects of personality, well-being, and cognition.

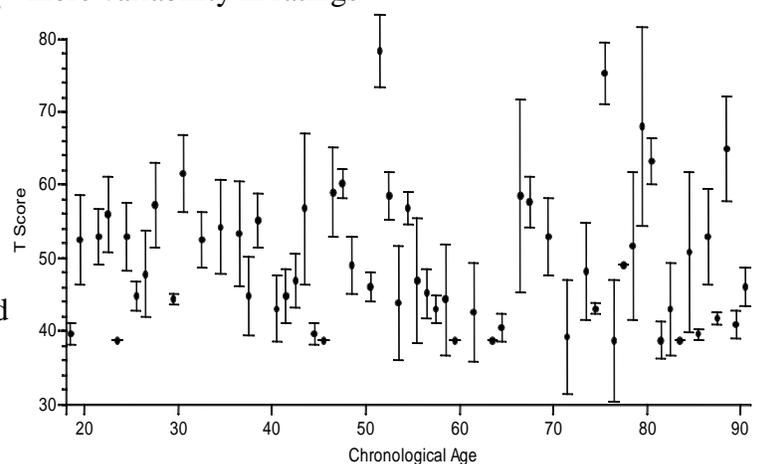
Our results show similar findings. The graph to the right represents the reported “how are you feeling

today” rating from a random selection of 60 participants. The black dots represent the average of all three session’s ratings and the bars represent the range of ratings over the three sessions. As you can see there is considerable variability within individuals as well as between different individuals.

These differences were not associated with age, but were related to variables such as depression, neuroticism, education, self-reported health, and performance on some cognitive tasks.

These results mean that more variability in ratings

of how you feel are associated with higher levels of depression, more negative feelings, and higher levels of neuroticism, while lower levels of variability are associated with lower levels of positive feelings, self-reported health, and cognitive performance. However, it is important to keep in mind that these results are only correlational- meaning that they are associated with one another but that one does not necessarily cause the other.





To read more about our research, look at the publication section of our webpage!

www.mentalaging.com

User name: Guest

Password: cogage

Life Satisfaction

Some of the questionnaires we asked you to complete at home contained questions designed to assess how satisfied you are with your life. For example, one of our questionnaires asked you to rate the degree to which you agree with various statements such as "So far I have gotten the important things I want in life" and "If I could live my life over, I would change almost nothing". We were interested in seeing whether there were age differences in how satisfied people are with their lives, and what possible factors were related to people's life satisfaction. Our results show that, not surprisingly, positive feelings and emotions were associated with higher life satisfaction; while anxiety, depression, and



Where does the money come from??



The Virginia Cognitive Aging Project (VCAP) is primarily supported by a grant from the National Institute on Aging (<http://www.nia.nih.gov/>), which is one of the 27 institutes and centers within the National Institutes of Health (<http://www.nih.gov/>). Most grant applications require at least several months to prepare, and once submitted the application receives two separate evaluations. The initial evaluation is conducted by experts in the

area, who convene in what is called a Study Section. This group is responsible for determining the scientific merit of the proposed research. If the first evaluation is sufficiently positive, the application is then reviewed by an Advisory Board which is responsible for determining the fit of the research to the mission of the specific Institute. Research grants from the National Institutes of Health are very competitive, with only 10-15% of the grant applications receiving funding over the last several years.

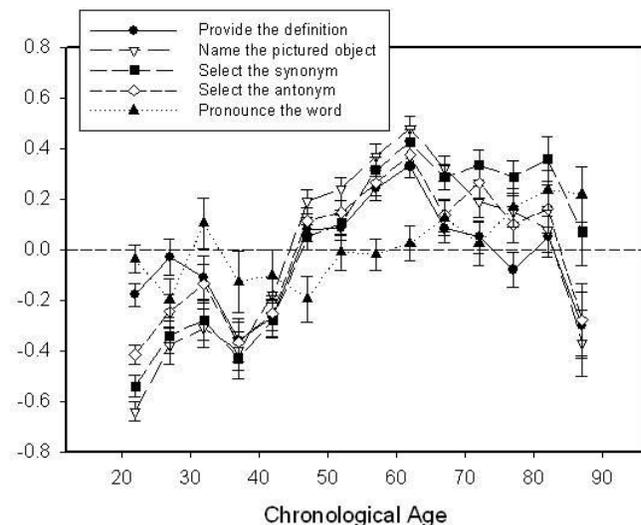
The major purpose of the grant that supports the Virginia Cognitive Aging Project is to develop sensitive methods of detecting age-related cognitive change and to identify factors that influence the magnitude of change. Our hope is that this research will eventually contribute to minimizing and possibly even preventing normal and perhaps some pathological age-related cognitive changes. The grant provides money to pay the 750 or more research participants and the 20 or more research assistants each year, in addition to rent for the laboratory space, purchase of equipment, and miscellaneous expenses such as printing and mailing of newsletters.



neurotism were associated with lower life satisfaction. However we did not find any age or sex differences in life satisfaction. We did find that cognitive ability was related to life satisfaction for younger and middle-aged adults, but not for older (60-94) adults. We think that this may be due to differences in lifestyles in adults at different ages. For example, older adults are less likely to still be in the workforce and attempting to attain career goals.

Age & Knowledge

Like a fine wine,
it appears your vocabulary
gets better with time!



Over the past nine years the Cognitive Aging Lab has been investigating changes in memory and cognitive ability over the average person's lifetime. Nearly 4000 different people have participated in the project since 2001. We've found that there are both cognitive losses as well as gains with increased age. One prominent gain appears to be a person's vocabulary skills. That is, knowledge, as reflected in tests of vocabulary, increases with increased age. You may remember that we asked you to perform several different types of vocabulary tasks including



providing the definition of words, naming a pictured object, selecting the synonym or antonym of a word, and pronouncing different words.

The figure to the left shows that vocabulary skills generally increase with age, peaking at about age 60. Interestingly enough, even at age 80 most individuals do better on vocabulary tasks than the average 20 year old!

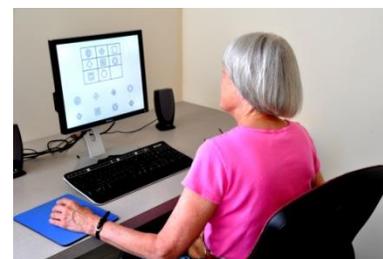
Study Time & Memory:

Participants Learn Swahili at the Cognitive Aging Lab!

In the summer of 2008 about 500 of our participants completed a task in which they were asked to learn Swahili as part of a graduate student's dissertation research. Participants studied a list of Swahili-English translations (e.g., *jibini*=*cheese*) for 3.5 seconds each. They then completed a test where the Swahili word (*jibini*) was presented and they were asked to give the English translation (*cheese*). The same Swahili-English

translations were then studied again, but this time the participants could decide how long they wanted to study the word pairs before moving on. What we were looking for in this task was how individuals allocated their study time when given another opportunity to study the same translations, and how their allocation of time was related to their performance on the memory task. We found

that individuals who consistently devoted more study time to the items that were incorrect on the first memory test recalled more translations on the second test than individuals who studied the unlearned items for a shorter amount of time. One of the implications of these results is that you should try to monitor how well you know something as you are trying to remember it, and spend more time on the parts that you don't know very well.



C.J. Hall, a participant with the Cognitive Aging Lab since 2001, works on one of our most popular tests.

Where are they now?

Every summer the Cognitive Aging Lab employs about 20 full-time research assistants. Since we began testing in 2001, over 130 different research assistants have worked in the laboratory! Here's what a few of them have been up to lately.



To read bios of all of our research assistants from summer 2009, visit our website at www.mentalaging.com under "Lab Members"

Lacy Krueger

(Research Assistant, 2004-2005;
Graduate Student Researcher, 2006-2009)

Lacy graduated from UVA in May 2009 with a Ph.D. in cognitive psychology, and she is now employed as an assistant professor at Texas A&M University-Commerce. She teaches courses on learning and memory, and is studying factors that influence memory performance. She hopes that her research can be informative for the education field, and help individuals improve their memory.



Megan Viar

(Coordinator, Summer 2008, 2009)

After graduating from UVA in May 2009 with a B.A. in psychology and religious studies, Megan is now attending Vanderbilt University working towards her Ph.D in clinical psychology focusing on anxiety disorders.



Karen Siedlecki

(Coordinator, Summer 2005;
Graduate Student Researcher, 2003-2006)

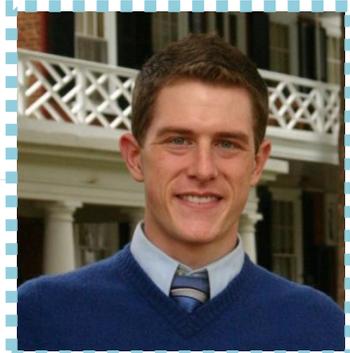
After receiving her PhD from UVA in 2006, Karen worked as a post-doctoral fellow at Columbia University. She is currently an Assistant Professor at Fordham University in New York City.



DJ Lick

(Research Assistant, Summer 2007-2008)

After graduating from UVA in May 2009 with a BA in American Studies, English Literature, and Psychology, DJ is currently working for a law firm in Washington DC that concentrates on health policy reform. He plans to return to student life in the future as a graduate student studying issues that face the lesbian and gay communities in the United States.



The Virginia Cognitive Aging Project is an on-going project that continues because of your participation and support. We will most likely be contacting you in the future and hope that you will participate with us again.

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