

Gray Matters

The Cognition and Aging Lab Newsletter

Fall 2010



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Dear Volunteers:

Greetings from the Cognition and Aging Lab! As usual, we are keeping busy with our research projects, and our graduate students continue to make timely progress toward their Ph.D. degrees. Sabra is working on her master's thesis, which is investigating the cognitive advantages and disadvantages of being bilingual. Meagan is working on her qualifying exams and developing her dissertation proposal, which involves the retrieval of proper names. Older adults report that they experience increased difficulties in retrieving names and that this problem is one of their most annoying frustrations. Meagan is conducting a study on this issue, and we hope that many of you will want to participate! We will be calling people in the spring, but if you know that you would like to participate, please call us at (352) 392-2480. We will make sure to call you first when we begin scheduling appointments.

Some other exciting news: I am on my way to Dortmund, Germany, where I will be giving a talk about our research at the International Conference on Aging and Cognition. The intention of the conference is to stimulate international collaborations for cognitive aging research and will focus on cognition and cognitive neuroscience for healthy aging. An additional focus will be on interventions aimed at influencing age-related cognitive deficits. I look forward to sharing some of the knowledge that I gain in our next newsletter.

As always, we greatly appreciate your involvement in our research studies. The Cognition and Aging Lab is now in its 12th year (almost 13), and with your help, I am optimistic that our next 12 years will be even more successful. We have learned a lot about language and memory in healthy aging, but there are still many research questions that we hope to answer.

Lise Abrams

Lise Abrams, Ph.D.
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***We all grow. We all
age. We all get older,
continuously.***

About Us:

Our lab investigates memory and language processes and the effects of aging on these processes.

Specific areas of interest include:

(1) memory retrieval failures such as tip-of-the-tongue states, which are naturally-occurring retrieval failures that are characterized by a temporary inability to recall a known word; and (2) language errors such as the production of spelling errors and homophone substitution errors.

The general goals of our research are to understand the causes of these retrieval failures as well as to explain why certain aspects of language and memory functioning are impaired in old age while others are spared.

Our research depends on you!

BREAKTHROUGH TEST MAY HELP DIAGNOSE ALZHEIMER'S DISEASE

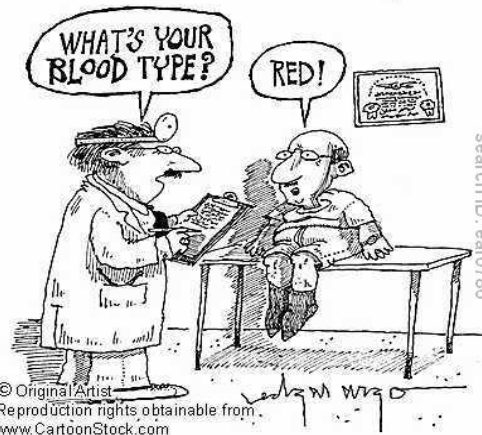
In Texas, scientists are close to developing a blood test that will inform doctors whether a patient has Alzheimer's Disease (AD). Using this test, doctors can detect early indicators of the disease and refer patients to specialists who can then treat and slow the disease's progression. Dr. Sid O'Bryant, a professor of neurology at Texas Tech Health Sciences Center and the main investigator of this study states, "If it's confirmed, this test will offer millions of geriatric patients across the country and the planet the opportunity at least to be screened annually. Then, if it's positive they can go to a specialist and get a proper workup and start treatment."

While current diagnostic tests cannot diagnose AD with 100% accuracy, the test in development correctly identified participants with AD 95% of the time. This test appears promising, however, the study needs to be replicated producing similar or more accurate results.

The test may also have the ability to distinguish the different types of Alzheimer's and to predict people's risk of developing the disease. Although a small company has developed a new brain scan detecting plaque, a main physical symptom of Alzheimer's, Dr. O'Bryant said such a test requires PET scans that most seniors cannot easily access. Early detection along with proper treatment substantially improves an Alzheimer's patient's outcome. If the Texas scientists' test proves to be successful, it will be a major advancement in identifying this elusive illness.

Source: <http://www.chron.com/disp/story.mpl/metropolitan/7124482.html>
<http://www.alzinfo.org/about-alzheimers/diagnosis>

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Older Haenyeo Women Dive to Survive

On the islands of Udo and Jeju, south of the Korean peninsula, the “Haenyeo” (sea women) dive into frigid waters, hold their breaths for several minutes, and collect various types of marine life from the sea floor.

These “Sea Women” challenge stereotypical gender roles in society, and popular ideas about aging as well. Amazingly, the majority of these women are over 60 years old! Starting over 1700 years ago, women dove into the depths of the sea, collecting food and pearls. For reasons that remain unknown,

only women did the diving making them the breadwinners of their households, and leading to the formation of a matriarchal society.

Improvements in the society’s economy allowed women to go to college and provided men with more job opportunities, producing a generation of aging Haenyeo that still dive because they do not have daughters who will follow in their footsteps.

There are two types of Haenyeo: those who dive from a boat, and those who go out from the coast. These women perform intense physical labor.

For example, when they collect seaweed and put it in their nets, the women typically carry up to about 110 pounds. The coast-diving Haenyeo can be seen trucking these nets on their backs when coming out of the water.

Due to their reliance on the tides, the Haenyeo women work continuously in the water for 4-5 hours, six to eight days in a row. Afterwards, they take seven to nine days off from work, which is surely a welcome way to recuperate before the next expedition.

Source: <http://www.reportage-bygettyimages.com/photo/83e097ae-e156-4d62-b011-9c9ffc267a4f.pdf>



I'M OUT OF AIR, THE SHARK HAS MY LEG,
I HAVE THE BENDS, HONESTLY, YOU CAN BE
SUCH A WHINER!

Did you Know?

- The muscle that lets your eye blink is the fastest muscle in your body. It allows you to blink 5 times a second. On average, **you blink 15 000 times a day**. That's about 10 times per minute, or more than five million times a year.
- Bananas are the world's most popular fruit after tomatoes. Most people complain when bananas are overripe or even freckled. The fact is that spotted bananas are sweeter, with a sugar content of more than 20%, compared with 3% in a green banana.
- Eskimos use refrigerators to keep food from freezing.

Courtesy of www.didyouknow.org

My Dog is My Therapist!

Some older adults find rest and relaxation by means of light reading or watching their favorite sitcom. However, researchers say that pet therapy can also be a useful method of healing and companionship. Especially for seniors, having a pet improves quality of life by reducing emotional and physical problems (i.e. depression, loneliness, loss of mobility).

Dr. Patricia McConnell, an animal behaviorist, explains that interacting with pets can lower your blood pressure and increase serotonin levels in the brain, and it may lead to increased exercise. She also said that some nursing homes with pet therapy programs have helped reduce depression and the social withdrawal

that many residents with Alzheimer's or dementia may face. Seniors who own pets engage in more conversations with others, focus on current interests and activities, and have more frequent social bonds with others. Those seniors who do not own pets may be at greater risk of dwelling over the past and leading solitary lives.

Cats and dogs are not the only animals that seniors can benefit from. Purdue University researchers observed that Alzheimer's patients in special care facilities ate more healthfully when fish tanks were placed in the dining room. Even if owning a pet is not for you, you can still get the same benefits by simply interacting with an animal.

Many senior facilities are integrating pet visitation therapy in order to combat three big problems associated with nursing home facilities: loneliness, helplessness, and boredom. These types of opportunities give those who love animals the chance to interact with one without the full-time responsibility.

A useful way to find the pet that is right for you is to log on to: www.petfinder.com, where you can search through a wide variety of eager pets that are currently awaiting adoption.

Source:

<http://www.everydayhealth.com/longevity/emotional-wellness/pet-therapy.aspx>



"There is no psychiatrist in the world like a puppy licking your face."

-Bern Williams

Source: http://www.cartoonstock.com/directory/t/talk_therapy.asp

You're Only As Old As You Feel

According to research from Purdue University, your interpretation about how old you feel affects how well you age. If you feel like you are older than your biological age, you are more likely to experience some of the downsides that are associated with aging. Markus H. Schafer, the doctoral student who is leading the study explains, "if you are older and maintain a sense of being younger, then that gives you an edge in maintaining a lot of the abilities you prize." So, the saying "you're only as old as you feel" may actually ring true.

Almost 500 adults between the ages of 55 and 74 were surveyed about aging in 1995 and 2005 as part of the National Survey of Midlife Development in the U.S. (MIDUS).

The participants' actual ages were compared to their perceived ages in order to

determine which has a greater impact on cognitive abilities during older adulthood.

In 1995, when participants were asked how old they usually felt, most said that they felt 12 years younger than their actual age. When asked again ten years later, younger-feeling participants felt more confident about their cognitive abilities.

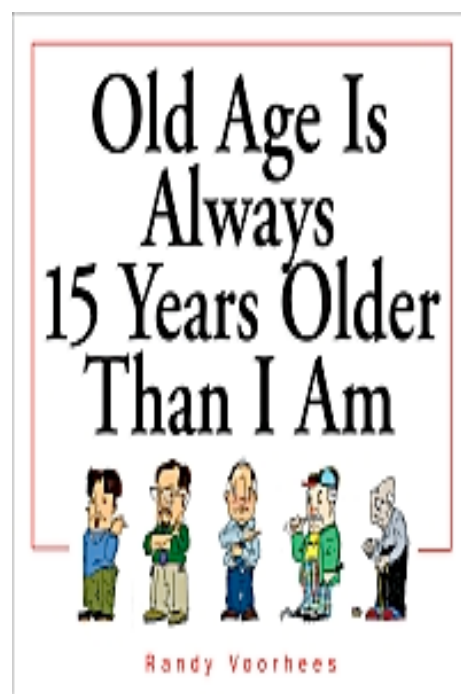
The question researchers want to answer in future studies is whether a person's wellness and happiness affect their cognitive abilities, or if a person's cognitive abilities affect their sense of wellness.

There are both positive and negative implications of this study. In our society, there is a strong emphasis on being young. People want to remain younger, so when they age, they can lose a lot of confidence in their cognitive abilities. On the other hand, the desire to stay youthful can

drive people towards engaging in new trends and activities, such as keeping up with new technology, which can help people feel rejuvenated.

Source:

<http://www.sciencedaily.com/releases/2010/03/100302123144.htm>



<http://www.andrewsmcmeel.com/products/enlarge.html?>

Try this fun tongue twister!

Source: http://www.fun-with-words.com/tongue_twisters.html

Mr. See owned a saw.	Had Soar seen See's saw	seesaw.
And Mr. Soar owned a see-saw.	Before See sawed Soar's seesaw,	But it was sad to see Soar so sore
Now, See's saw sawed Soar's seesaw	See's saw would not have sawed	just because See's saw sawed
Before Soar saw See,	Soar's seesaw.	Soar's seesaw.
Which made Soar sore.	So See's saw sawed Soar's	

Sudoku

Fill in the boxes with the correct number. A number should appear only once in each row, column, and region.

	8						9	
		7	5		2	8		
6			8		7			5
3	7			8			5	1
2								8
9	5			4			3	2
8			1		4			9
		1	9		3	6		
	4						2	

**Answers
on page 9!**

Source: <http://www.sudokuto-day.com/easy-sudoku-puzzle-i1.html>

DO YOU OR SOMEONE YOU KNOW HAVE ALZHEIMER'S DISEASE?

Participants are needed for a study to help us better understand language problems in Alzheimer's disease.

Participants will be asked to attend 1 testing session and 1 brain imaging session. Compensation will be provided.

Requirements to participate:

- *Alzheimer's disease diagnosis*
- *Right handed*
- *Native English speaker*
- *Able to follow simple instructions*
- *Cannot be claustrophobic*
- *Cannot have metal implants (other than dental) or cardiac pacemaker*

If you are interested in participating or would like more information about this study, please call (352) 273-5249



Gone with the Wind



Have you ever thought that you were too old to try some of the adrenaline-rushing activities that “kids” are doing these days? That did not stop 80 year old Ruth Shivers from jumping out of a plane. Along with her skydiving instructor, Ruth conquered the skies for a new adventure.

She said that she wanted to go skydiving back in her 20's, but she could not because she was too small, and they did not have tandem jumps back then. Before the year is over, she also plans on riding in a zeppelin and running with polar bears.

Source: <http://www.bakersfieldnow.com/news/local/94686004.html>

Older Internet Users Join Networking Sites

The number of adults over 50 who use social-networking sites, such as Facebook and Twitter, has almost doubled in the past year. According to a survey by the Pew Research Center, between April 2009 and May 2010, the percentage of Internet users 50 years of age and older who use social-networking sites has increased from 22 percent to 42 percent. Those who were 65 and older had a 100 percent increase, while those who were between the ages of 50 and 64 rose 88 percent. By comparison, those aged 18-29 who joined social-networking sites has only increased by 13 percent.

Many older Internet users primarily use e-mail to stay in contact with family, friends, and colleagues, but they are starting to use social-networking sites for daily communication and social interactions. Some older adults use Facebook to reconnect with friends (i.e. high school classmates) while many use Twitter to connect with people currently in their lives. Even though younger adults outnumber older adults in networking sites, the proportion of older adults users is likely to keep growing.

Source: <http://www.cnn.com/2010/TECH/social.media/08/27/older.users.social.networks/>



FACEBOOK

You're doing it wrong.

With a Little Help from My Spouse

A 2010 research study suggests that interspouse collaboration may help individuals cope with aging-related losses in memory performance.

Researchers hypothesized that interaction between familiar partners is of greater benefit than between unfamiliar partners. Partners who are familiar with each other have access to a pool of shared memories, and may provide cueing strategies to retrieve certain memories.

The researchers found that as an older adult ages, the amount of cognitive resources at their disposal declines, which then restricts the potential for collaboration. However, collaborating with one's spouse can help shield this disadvantage by providing a context for memory re-

trieval. Exclusive reliance on spousal collaboration can have its drawbacks, however, because one could lose his or her sense of autonomy.

Yet, collaborating with a spouse is an easy strategy to assist with the effects of cognitive aging. Future research needs to be done to assess the effects of collaborating with other people (i.e. friends, coworkers, grandchildren) of different age groups.

Source:

<http://content.karger.com/ProdukteDB/produkte.asp?Aktion=ShowPDF&ArtikelNr=317335&Ausgabe=0&ProduktNr=224091&filename=317335.pdf>

Puzzle Answers

Answers to Sudoku

1	8	5	4	3	6	2	9	7
4	3	7	5	9	2	8	1	6
6	9	2	8	1	7	3	4	5
3	7	6	2	8	9	4	5	1
2	1	4	3	7	5	9	6	8
9	5	8	6	4	1	7	3	2
8	6	3	1	2	4	5	7	9
7	2	1	9	5	3	6	8	4
5	4	9	7	6	8	1	2	3

Answers to Rebus Puzzle

Box 1: Paradox
 Box 2: Three Strikes
 You're Out
 Box 3: Tripod
 Box 4: Platinum (plat in um)
 Box 5: Big Foot
 Box 6: Broken Nose