

WATERLOO RESEARCH IN AGING PARTICIPANT POOL

Our mission is to facilitate research that will further our knowledge of the aging process.



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Note from the WRAP Staff

We would like to thank you for your contribution of time in participating with WRAP research studies. With the help from individuals such as yourself, we can investigate several different important aspects of natural aging processes in healthy older adults. We would not be able to do it without our wonderful volunteer participants.

WRAP Staff



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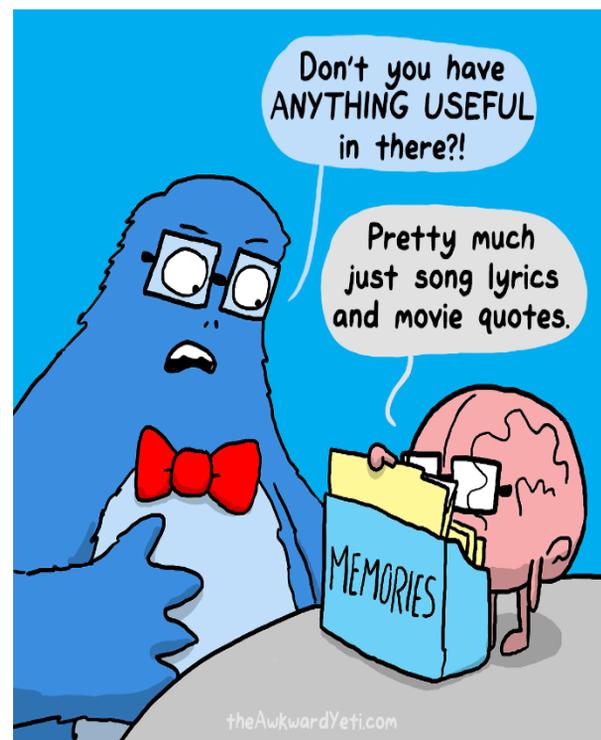
Research Highlights: Exercise helps improve sensory perception in older adults

Aysha Basharat, MA, & Michael Barnett-Cowan, PhD

An important function of the brain is to synchronize and associate sensory events in the world around us, but this can become difficult as we age and can lead to an increased risk of falls and speech deficits. Currently, research determining how one can improve the brain's ability to perceive the order of sensory events is lacking. It is well known that regularly participating in aerobic exercise can improve our physical fitness, brain function, and quality of life and recent research has shown that even a single session of exercise can improve cognitive ability, however, research related to the effects of exercise on the brain's ability to perceive sensory information is missing. The aim of my research was to investigate whether or not a single session of aerobic exercise could impact sensory integration. We found that after a single session of exercise, participants were not only faster at responding to stimuli, but were also more accurate in correctly associating sensory information.

Why does time 'move faster' as we age?

Recent research has given support for the common feeling that time seems to move much faster as we age. Researchers are starting to suggest that this feeling may be due to the way that memories are formed in the brain. Memories exist physically in the brain as connections between cells (called 'neurons'). When a person experiences a brand new event and doesn't have a pre-existing memory to tie in with it, the brain works extra hard to solidify this new experience in the brain. Because of this extra work, new memories are perceived to last longer and we can remember more details. However, this means that as we get older and have more life experience, less things are truly new to us. This means that for an older adult, their most recent years may seem to have moved faster than in their youth.



Research Highlights: Are involuntary memories linked to mental health in aging? Examining the role of emotion

Ryan Yeung, MA, & Myra Fernandes, PhD

In daily life, people sometimes experience memories from their personal past without even trying to remember them; simple things like smelling a certain scent or feeling a certain emotion can bring back rich and detailed memories involuntarily. When these memories become recurrent - that is, memories of the same event are re-experienced repetitively - they might be linked to mental health status. Our study found that experiencing these involuntary memories is related to poorer mental health (e.g., more symptoms of depression, anxiety), especially when those memories are emotionally negative. However, older adults were far more likely to report emotionally positive involuntary memories than young adults! We believe that regulating your emotions (something that older adults are consistently better at than young adults) may be a key factor in how memories are linked to mental health.

Sudoku Games

Instructions:

Fill in the blanks so that each column, each row, and each of the nine 3×3 grids that make up the larger 9×9 grid contains all of the digits from 1 to 9.

Answers are on page 4.

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

Game 1 (Beginner)

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

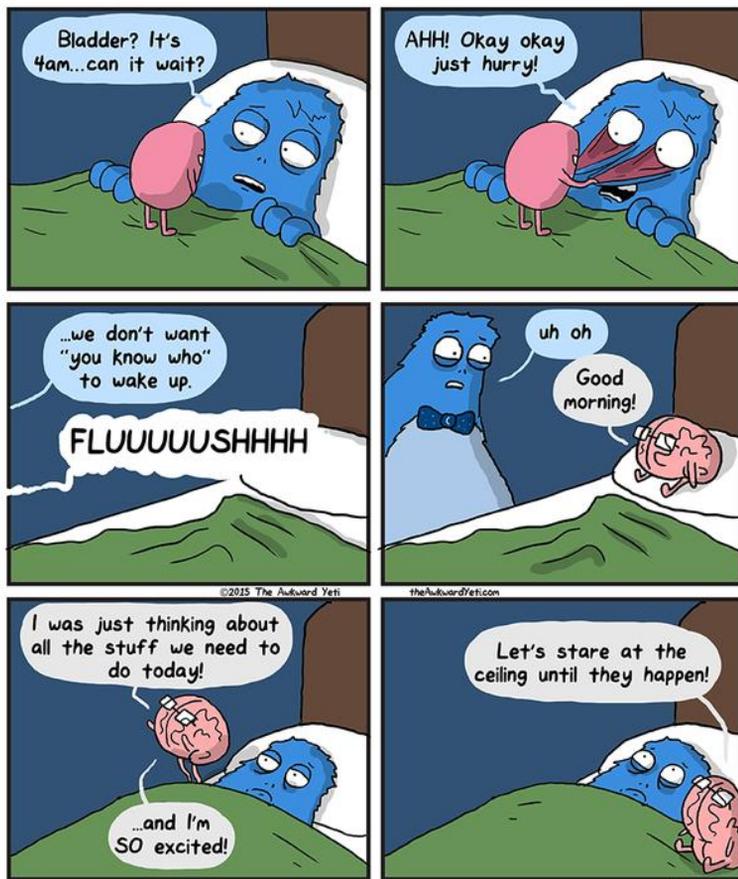
Game 2 (Intermediate)

Brain Teasers

1. A man pushes his car to a hotel and tells the owner he's bankrupt. Why?
2. A man is looking at a photograph of someone. His friend asks who it is. The man replies, "Brothers and sisters, I have none. But that man's father is my father's son." Who was in the photograph?
3. What is special about these words: job, polish, herb?
4. A sundial has the fewest moving parts of any timepiece. Which has the most?
5. What makes this number unique: 8,549,176,320?

Answers

1. He's playing Monopoly | 2. His son | 3. They are pronounced differently when the first letter is capitalized | 4. An hourglass—It has thousands of grains of sand | 5. It has each number, zero through nine, listed in alphabetical order



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- ❖ Are you a current WRAP volunteer who knows someone that might be interested in joining WRAP? Please share this newsletter with them and have them contact us for more information!
- ❖ Are you a healthy aging older adult over the age of 60 who would be interested in becoming a WRAP volunteer? Please contact us for more information!

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Game 1

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

Game 2

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

By virtue of receiving this newsletter, you are in our database. If you would like your name or update your contact information, please contact Brady Roberts at 519-888-4567 ext. 37776 or wrap@uwaterloo.ca