

**WATERLOO RESEARCH IN AGING  
 PARTICIPANT POOL (WRAP Pool)  
 Annual Newsletter - Issue 3  
 Winter 2010**

Waterloo  
 Research in  
 Aging  
 Participant Pool




*"Linking the senior community to university research"*

**New Year's Greetings from WRAP**

Happy New Year's and welcome to 2010. The WRAP team would like to thank you for taking the time to take part in our quest to better understand the aging process through research. Thanks to volunteers like you we will be able to further our knowledge of the aging process and investigate the differences between healthy aging, and disease processes including but not limited to stroke, Parkinson and Alzheimer disease. We have included some descriptions of the studies which were completed by WRAP volunteers like yourself.

**Research Update**

**Effect of stance stability on sit-to-stand performance in healthy young and older adults**

**Researchers: Sakineh Akram and Bill McIlroy**

The ability to rise unassisted from a seated position is a prerequisite for many activities of daily living and is critical for functional independence. One cannot walk without standing up first. Diminished sit-to-stand ability leads to either frequent falls or immobility due to fear of falling. Fall-related injuries and psychological and physiological health issues due to immobility further diminish the general well-being of individual.

Transition from a seated position to a standing position is difficult for some older adults. While contribution of muscle weakness to sit-to-stand difficulty in older adults is well documented, far less is known about the impact of diminished stance stability with aging on sit-to-stand performance.

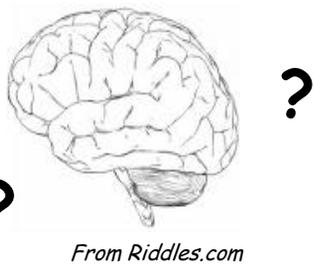
Feet position is one of the factors that affect stability during sit-to-stand. We used an instrumented chair to examine the performance of healthy young and older adults as they stood up from a seated position. Participants performed the task in different feet conditions (i.e., with their feet closer or further away from the chair), and different arm conditions (arms on lap, arms crossed in front of the chest, arms hanging by the person's sides, and using the armrest). Participants' whole body movement was captured by video cameras. We also measured how much force the person applied on the chair and on the floor during the

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**Brain**

**Teasers**

*Try these out just for fun!*



**Riddle A: All Poured Out**

What is the one thing which, once poured out, cannot be gathered again?

**Riddle B: I Am Heavy**

Forward I am heavy, backwards I am not. What am I?

**Riddle C: Welcome The Day!**

I welcome the day with a show of light, I stealthily came here in the night. I bathe the earthy stuff at dawn, but by noon, alas! I'm gone! What am I?

**Winter Word Scramble**

*Unscramble the words below*

1. rFybeuar \_\_\_\_\_
2. taco \_\_\_\_\_
3. iikngs \_\_\_\_\_
4. bsawlsonl \_\_\_\_\_

*Answers: A: Rain or rainfall. B: ton C: The morning dew. Word Scramble: 1) February(2) coat(3) skiing: 4) snowballs.*

## Research Update Continued

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sit-to-stand task using special forceplates that are embedded in the floor in our lab.

We are in the process of analysing the data. Two components of the task, i.e., transition from sitting to standing and postural stability once the standing position is assumed, are studied separately. The potential effects of the position of the feet and use of arms on stance stability and sit-to-stand transition are examined.

The information obtained through this study expands our knowledge of some of the factors contributing to sit-to-stand difficulty in older adults. This information has important implications in the development of balance rehabilitation programs and fall prevention for elderly population.

## **The Age-Related Positivity Effect in Autobiographical Memory:**

### **A Diary Study**

**Researchers: Emily Schryer and Mike Ross**

Healthy aging is associated with improved emotional self-regulation and the pursuit of goals that enhance well-being. Researchers have found that relative to younger adults, older adults show better recall of positive than negative stimuli such as pictures and words. Presumably, autobiographical memories could have a stronger influence on well-being than memories for pictures or words. In the current research we examined older (67-83) and younger (17-26) adults' recall of emotional autobiographical events in daily life. For five consecutive days, participants described one pleasant and one unpleasant event in an online diary questionnaire and rated the vividness, frequency, and valence of each memory. A week later we asked participants to recall the same events they had reported during the diary week. During the diary week, older adults were able to report a pleasant event each day but could not produce an unpleasant event on 40% of the daily diary questionnaires. A week later, however, older adults were equally likely to recall the pleasant and unpleasant events that they had reported in the diary week. Younger adults were able to report one pleasant and one unpleasant event on every diary questionnaire and were equally likely to recall both types of events in Session 2. Older adults rated all of their memories as more vivid and their pleasant events as occurring more frequently than did younger adults. We suggest that the motivation to self-regulate emotion affects older adults' experience and interpretation of emotional events but not their long-term recall of autobiographical events.

## WRAP Members

### **WRAP Directors**



**Dr. Myra Fernandes**  
Department of  
Psychology



**Dr. Eric Roy**  
Department of  
Kinesiology

### **WRAP Coordinator**



**Michelle Manios**

## Call for Participants!

If you are currently not a volunteer of the Waterloo Research in Aging Participant Pool please contact us to find out more about how you can help!

If you already are a volunteer, please share this newsletter with any family and friends who you think might be interested in taking part in research studies.

## For further information please contact us

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