performance was associated with increased likelihood of Underconfidence (OR = 1.03, 95% CI [1.00, 1.06], p=.04).

Conclusions: Objective financial knowledge and subjective financial confidence are related yet distinct aspects of financial literacy. Discrepancies between financial knowledge and confidence are related to both cognitive and non-cognitive factors, such as personality and differing life experiences associated with educational attainment and sex-related social roles. Results may help clinicians identify profiles of older adults (e.g., high confidence and low knowledge/"Overconfident") at risk for dysfunctional financial behaviors, including susceptibility to fraud and/or irresponsible financial decision-making.

Categories: Aging
Keyword 1: everyday functioning
Keyword 2: aging (normal)
Keyword 3: mild cognitive impairment
Correspondence: Rachel Mis, Temple University, rachel.mis@temple.edu

---

58 Cognitive and Brain Reserve Predict a Decline in Adverse Driving Behaviors Among Cognitively Normal Older Adults

Samantha A Murphy[1], Ling Chen[1], Jason M Doherty[1], Prerana Acharyya[1], Noah Riley[1], Ann M Johnson[1], Alexis Walker[1], Hailee Domash[1], Maren Jorgenson[1], Ganesh M Babulal[1,2,3]
[1]Washington University School of Medicine, St. Louis, MO, USA. [2]University of Johannesburg, Johannesburg, South Africa. [3]The George Washington Univerity School of Medicine and Health Sciences, Washington, D.C., USA

Objective: Daily driving behavior is ultimate measure of cognitive functioning requiring multiple cognitive domains working synergistically to complete this complex instrumental activity of daily living. As the world's population continues to grow and age older, motor vehicle crashes become more frequent. Cognitive and brain reserve are developing constructs that are frequently assessed in aging research. Cognitive reserve preserves functioning in the face of greater loss of brain structure as experienced during cognitive impairment or dementia. This study determined whether cognitive reserve and brain reserve predict changes in adverse driving behaviors in cognitively normal older adults.

Participants and Methods: Cognitively normal participants (Clinical Dementia Rating 0) were enrolled from longitudinal studies at the Knight Alzheimer's Disease Research Center at Washington University. Participants (n=186) were ≥ 65 years of age, required to have Magnetic Resonance Imaging (MRI) data, neuropsychological testing data, as well as one full year of naturalistic driving data prior to the beginning of COVID-19 lockdown in the United States (March 2020). Naturalistic driving behavior data was collected via the Driving Real World In-vehicle Evaluation System (DRIVES). DRIVES variables included idle time, over speeding, aggression, number of trips, including those at day and night. MRI was performed on 3T Tesla using a research imaging protocol based upon ADNI that includes a high-resolution T1 MPRAGE for assessment of brain structures to produce normalized whole brain volume (WBV) and hippocampal volume (HV). WBV and HV were each assessed using tertiles comparing the top 66% with the bottom 33% where the bottom represented increased atrophy. The Word Reading subtest of the Wide Range Achievement Test 4 (WRAT 4) was utilized as a proxy for cognitive reserve. WRAT 4 scores were compared with the top 66% and the bottom 33% where the bottom were poor performers. Linear-mixed-effect models adjusted for age, education, and sex.

Results: Participants on average were older (73.7±4.9), college educated (16.6±2.2), and similar sex distribution (males=100, females=86). Analyses showed statistically significant differences in slopes where participants with increased hippocampal and whole brain atrophy were less likely to overspeed (p=0.0035; p=0.0003), drive aggressively (p=0.0016; p<0.0001), and drive during the daytime (p<0.0001; p<0.0001). However, they were more likely to spend more time idling (p=0.0005; p<0.0001) and drive during the nighttime (p=0.003; p=0.0002). Similar findings occurred with the WRAT 4 where participants with lower scores were less likely to overspeed (p=0.0035), drive aggressively (p=0.0024), hard brake (p=0.0180), and drive during the daytime (p<0.0001) while they were more likely to also spend more time idling (p=0.0012) and drive during the nighttime (p=0.0004).

Conclusions: Numerous changes in driving behaviors over time were predicted by increased hippocampal and whole brain atrophy as well as lower cognitive reserve scores proxied by the WRAT 4. These changes show that those with lower brain and cognitive reserve are more likely to restrict their driving behavior and adapt their daily behaviors as they age. These results suggest older adults with lower brain and cognitive reserve are more likely to avoid highways where speeding and aggressive maneuvers are more frequent.

Categories: Aging
Keyword 1: driving
Keyword 2: cognitive reserve
Keyword 3: aging (normal)
Correspondence: Samantha Murphy Department of Neurology, Washington University School of Medicine msamantha@wustl.edu

---

59 An Examination of the Moderating Effect of Self-Efficacy on the Association Between Health Literacy and Healthy Activity Engagement in Older Adults

Samina Rahman, Carolyn Pagán, Maureen Schmitter-Edgecombe
Washington State University, Pullman, WA, USA

Objective: Engagement in activities that promote overall brain health and well-being is often a key step in reducing risks to cognitive health in older adults. Given that higher health literacy has been found to be associated with healthier lifestyles, it is unsurprising that it has been the focus of many studies and programs aimed at improving the health outcomes of older adults. An equally important factor to consider when it comes to such efforts is the role of moderating variables in the relationship between health literacy and engagement in healthy behaviors. The present study examined the moderating effect of self-efficacy, a variable that has been shown to be positively associated with both health literacy and health behaviors. We hypothesized that increased self-efficacy will strengthen the relationship between health literacy and healthy activity engagement in a sample of community-living older adults.
Participants and Methods: Forty-nine older adults (age: M = 64.35, SD = 8.00; education: M = 16.39, SD = 2.37; 87.76% female) completed a health literacy measure (Newest Vital Sign; NVS), a self-efficacy questionnaire (General Self-Efficacy Scale; GSE), and a lifestyle behaviors questionnaire (Healthy Aging Activity Engagement Scale; HAAE). The NVS is a performance-based measure in which participants are asked to interpret the verbal and numerical information of a nutrition label to make health-related decisions. The GSE is a self-report measure that evaluates one's belief in their ability to handle challenges, solve problems, and accomplish goals. The HAAE is a self-report measure that assesses one's engagement in healthy activities across multiple health domains.
Results: To examine whether self-efficacy moderates the relationship between health literacy and healthy activity engagement, a moderation analysis was conducted using Hayes' PROCESS macro for SPSS with age and education included in the model as covariates. The results revealed no significant interaction between health literacy and self-efficacy, $b = 0.23$, $p = .59$, 95% CI [-0.60 to 1.05].
Conclusions: Contrary to expectations, in the present sample, the degree of self-efficacy was not a condition under which level of health literacy exerted its influence on healthy activity engagement in older adults. Future studies with larger and more nationally representative samples are needed to explore self-efficacy and other potential moderating factors in order to identify individual characteristics that support older adults' adoption and engagement in health-promoting behaviors.

Categories: Aging
Keyword 1: aging (normal)
Keyword 2: quality of life
Keyword 3: self-report
Correspondence: Samina Rahman, Washington State University, samina.rahman@wsu.edu

---

60 The Impact of Retirement Status on Cognitive Dysfunction in Alzheimer's Disease

Sandra S Loza, Lisa J Lee, Stephanie M Liu, Ysmara H Sainz, Raghad Tabaza, Ruth Morin, Lauren L Bennett