

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)

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

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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

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

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Objective: Prior research supports retirement may negatively impact cognitive functioning. The current study examined the relationship between retirement status and the level of cognitive dysfunction amongst individuals with Alzheimer's disease (AD). For the purpose of this study, it was predicted that there would be significantly higher levels of cognitive dysfunction in retired participants after controlling for age.

Participants and Methods: Participants (ages 65 to 91) were drawn from the Alzheimer's Disease Neuroimaging Initiative (ADNI). The sample included 110 participants who were retired and 111 participants who were not retired. Cognitive dysfunction was assessed using the cognitive subscale of the modified Alzheimer's Disease Assessment Scale (ADAS). A one-way ANCOVA analysis was conducted with cognitive dysfunction as the dependent variable and the age of the participants as a covariate.

Results: The results of the one-way ANCOVA showed being retired was a significant predictor of greater cognitive dysfunction amongst individuals with AD after controlling for age ($F(df=1, 218) = 231.143, p < .001, p < .05$) and accounted for 52% of the variance in the level of cognitive dysfunction.

Conclusions: Being retired is associated with higher levels of cognitive dysfunction in AD after accounting for the effects of age. As such, continued cognitive activity may slow the progression of cognitive declines amongst individuals with AD who are retired. There is a need for future longitudinal research to determine how late retirement may delay the progression of cognitive decline in AD by controlling for other moderator factors such as genetics and work-related stress.

Categories: Aging

Keyword 1: neurocognition

Keyword 2: dementia - Alzheimer's disease

Keyword 3: neuropsychological assessment

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61 Network Segregation Predicts Processing Speed in the Cognitively Healthy Oldest-old

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Objective: Understanding the factors contributing to optimal cognitive function throughout the aging process is essential to better understand successful cognitive aging. Processing speed is an age sensitive cognitive domain that usually declines early in the aging process; however, this cognitive skill is essential for other cognitive tasks and everyday functioning. Evaluating brain network interactions in cognitively healthy older adults can help us understand how brain characteristics variations affect cognitive functioning. Functional connections among groups of brain areas give insight into the brain's organization, and the cognitive effects of aging may relate to this large-scale organization. To follow-up on our prior work, we sought to replicate our findings regarding network segregation's relationship with processing speed. In order to address possible influences of node location or network membership we replicated the analysis across 4 different node sets.

Participants and Methods: Data were acquired as part of a multi-center study of 85+ cognitively normal individuals, the McKnight Brain Aging Registry (MBAR). For this analysis, we included 146 community-dwelling, cognitively unimpaired older adults, ages 85-99, who had undergone structural and BOLD resting state MRI scans and a battery of neuropsychological tests. Exploratory factor analysis identified the