

associations between subjective and objective cognition for memory or language domains. The pattern of results did not change when the total number of TBIs was included in the models.

Conclusions: In this DoD-ADNI sample, stronger associations between subjective and objective attention were evident among individuals with mild and moderate-to-severe TBI compared to Veterans without a TBI history. Attention/executive functioning measures (Trails A and B) may be particularly sensitive to detecting subtle cognitive difficulties related to TBI and/or comorbid psychiatric symptoms, which may contribute to these attention-specific findings. The strongest associations were among those with moderate-to-severe TBI, potentially because the extent to which their attention difficulties are affecting their daily lives are more apparent despite no significant differences in objective attention performance by TBI group. This study highlights the importance of assessing both subjective and objective cognition in older Veterans and the particular relevance of the attention domain within the context of TBI.

Categories: Aging

Keyword 1: traumatic brain injury

Keyword 2: attention

Keyword 3: aging (normal)

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57 Financial Literacy in Older Adults: Cognitive, Demographic, and Personality Factors Related to Discrepancies between Objective Financial Knowledge and Subjective Financial Confidence

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Objective: Management of finances is one of the earliest domains of daily living to decline in the neurodegenerative disease process, and poorer financial literacy is associated with worse cognition even in healthy, normative aging. However, some studies have demonstrated that cognitively normal older adults demonstrate preserved real-world financial outcomes despite

the presence of age-related cognitive decline. One account for this discordance posits that older adults rely on intact financial knowledge to circumvent negative effects of declining fluid cognitive abilities. Also important to real-world financial behavior is insight into one's level of financial knowledge and expertise (i.e., subjective financial confidence), which in some studies has been shown to have an equal or stronger influence on real-world financial behaviors compared to objective financial knowledge. This study investigated older adults' financial abilities by identifying groups of individuals with discrepancies between objective financial knowledge and subjective financial confidence and exploring cognitive and non-cognitive (demographic, personality) factors associated with discrepancy group membership.

Participants and Methods: Participants were 4,610 older adults (M age 71.18 ± .91) from the Wisconsin Longitudinal Study who answered 12 true-false questions on financial concepts (accuracy) and rated their confidence on each response. Standardized scores of accuracy and confidence were used to classify participants into three discrepancy groups (1) Overconfident (confidence >1 SD above accuracy), (2) Underconfident (accuracy >1 SD above confidence), and (3) Equal (accuracy and confidence within 1 SD). Logistic regression examined factors associated with discrepancy group membership.

Results: Higher financial accuracy was moderately correlated with greater confidence ($r=.42$, $p<.001$). Approximately 29% of participants had standardized accuracy and confidence scores that differed by one standard deviation or more, with 14% of participants belonging to an "Overconfident" group and 15% to an "Underconfident" group. Lower likelihood of Overconfidence group membership was associated with higher levels of education ($OR = .87$, 95% CI [.82, .93], $p<.001$) and better cognitive performance on tests of delayed recall ($OR = .90$, 95% CI [.84, .97], $p=.006$) and numerical reasoning ($OR = .94$, 95% CI [.91, .97], $p<.001$), while higher extraversion was associated with increased likelihood of Overconfidence ($OR = 1.03$, 95% CI [1.00, 1.05], $p=.04$). Lower likelihood of Underconfident group membership was associated with better performance on cognitive tests of delayed recall ($OR = .90$, 95% CI [.84, .96], $p=.002$), male sex ($OR = .60$, 95% CI [.47, .77], $p<.001$), and lower levels of conscientiousness ($OR = .95$, 95% CI [.92, .99], $p<.001$), while better letter fluency

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

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

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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 ($p=0.0004$).