

suggesting that 64% of the total variance in fluid intelligence in this sample is due to interindividual differences. Model 2 revealed that the average fluid intelligence score at baseline mean age (55.85) was 6.79 and significantly decreased with each year increase since baseline. Results from Model 3 (trimmed) revealed that being male, white, and having at least a university degree were associated with higher score at baseline, while being older and having more recent depressive symptoms were associated with lower scores. Higher social support quality was associated with higher scores while higher social support quantity was associated with lower scores at baseline; however, higher social support quantity at baseline was associated with less decline in scores over time. Surprisingly, having at least one e4 allele was associated with higher scores. Engaging in more moderate physical activity was associated with lower scores at baseline, however, individuals who increased the length of their moderate physical activity sessions over time showed higher timepoint-specific fluid intelligence scores. Additional significant interactions will be elaborated.

Conclusions: Results suggest that increases in the length of moderate physical activity exercise sessions were associated with better cognitive function over time. Having better social support quality was also associated with better cognitive function, while higher social support quantity was associated with less cognitive decline over time. These findings suggest that positive lifestyle changes in older adulthood may slow cognitive decline.

Categories: Aging

Keyword 1: aging (normal)

Keyword 2: cognitive functioning

Keyword 3: mild cognitive impairment

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42 Age-Related Alterations in Representational Forms of Imagination: A Novel Scoring Protocol Applied to Autobiographical Memory

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Objective: Human imagination is a complex system that allows us to form images or concepts in the mind that are not present to the senses. Research on imagination has been heavily influenced by the idea that humans store two distinct types of long-term memory: episodic and semantic memory. This theoretical distinction is particularly important in the context of aging, where older adults show reduced episodic memory compared to semantic memory (Levine et al., 2002). However, recent work has shown that these two memories are not as distinct as once thought (Renoult et al., 2019; Irish & Vatansever, 2020), suggesting a need to either refine the relationship between these concepts, or the concepts themselves.

Here, we apply a broader framework for imagination to the autobiographical memories of older adults. Introduced by Andrews-Hanna & Grilli (2021), memory and future thoughts can be understood as the outcome of the collaboration between two representational forms of imagination: the mind's mind and the mind's eye. The mind's mind is described as a high-level, abstract form of imagination accompanied by a verbal representational form, and the mind's eye is described as a contextually-specific, image-based form of imagination. In the present study, we examine whether this broader framework for understanding imaginative thought can a) explain some of the established age-related changes in episodic and semantic memory, and b) extend beyond existing research to offer new ways to conceptualize autobiographical memory in aging.

Participants and Methods: In this study, we introduce a novel scoring protocol distinguishing mind's eye from mind's mind forms of imagination and apply this protocol to the autobiographical memories of eighty-two cognitively normal older adults. Participants were instructed to retrieve unique autobiographical events, and to focus on describing event-specific details. All data were scored both with our new scoring protocol as well as the Autobiographical Interview scoring protocol from Levine et al. (2002).

Results: Our novel scoring protocol demonstrated high inter-rater reliability across two raters for both mind's mind (0.95) and mind's eye (0.96) details. First, we show that the proportion of mind's mind and mind's eye details on average are significantly different, with an increased proportion of mind's eye details. Second, we find that both mind's eye detail production and mind's mind detail production is

significantly reduced with age, whereas only internal details decline across age when scored with the Autobiographical Interview scoring procedure.

Conclusions: The new scoring protocol suggests that both mind's mind and mind's eye details undergo change with age, a finding that shares similarities and differences with results from the Autobiographical Interview scoring technique. Taken together, our results hint at a more elaborate set of detail types forming autobiographical memories that change with age, with implications for understanding episodic and semantic memory.

Categories: Aging

Keyword 1: aging (normal)

Keyword 2: memory: normal

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43 Mood and Everyday Function in Older Adults: Analyses of Self-report and Performance-based Measures of Everyday Function

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Objective: The relation between depressed mood and functional difficulties in older adults has been demonstrated in studies using self-report measures and has been interpreted as evidence for low mood negatively impacting everyday functional abilities. However, few studies have directly examined the relation between mood and everyday function using performance-based tests. This study included a standardized, performance-based measure of everyday action (Naturalistic Action Task, NAT) to test the prediction that report of depression symptoms are associated with self-report and performance-based tests of everyday function. Associations with anxiety symptoms and motivation/grit and everyday function also were explored.

Participants and Methods: 68 older adults without dementia were screened and recruited (n = 55, M age = 74.21, SD= 6.80, age range =

65 to 98) from the community and completed self-report measures of depression symptoms (GDS), anxiety (GAI), motivation (Short Grit-S), and everyday functioning (FAQ). Participants also performed the NAT, which requires completion of a breakfast and lunch task and is scored for task accomplishment, errors (micro-errors, overt, motor), and total time. Additionally, an informant also reported on the participant's everyday function. Spearman correlations were performed and results showing a medium effect size or greater are reported.

Results: Participant mood (GDS) was associated with self-reported function (FAQ; $r = .45$) but not performance-based measures of everyday function (NAT). Self-reported anxiety and motivation were not meaningfully associated with either self-reported or performance-based everyday function. Participant self-report (FAQ) and informant report of participant's function (I-FAQ) supported the validity of performance-based assessment as both were meaningfully associated with NAT performance (FAQ x NAT overt errors $r = .34$; I-FAQ x NAT micro-errors $r = .34$; I-FAQ x NAT motor errors $r = .49$).

Conclusions: Mood, but not anxiety or motivation, was associated with self-reported everyday function but not performance-based function. When considered alongside the meaningful relations between self/informant-report of function and everyday task performance, results suggest mood does not impact everyday function abilities in community-dwelling older adults without dementia. We suggest that frameworks to be reconceptualized to consider the potential for mild functional difficulties to negatively impact mood in older adults without dementia. Additionally, interventions and compensatory strategies designed to improve everyday function should examine the impact on mood outcomes.

Categories: Aging

Keyword 1: everyday functioning

Keyword 2: self-report

Keyword 3: mood disorders

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44 Dietary Nitrate Intake in Older Adults Associated with Increased Cognition and Reduced Depression