

ADNI met inclusion criteria. It was hypothesized Black individuals would be more cognitively impaired than their White counterparts. A matched pairs t-test was utilized to examine the relationship between global cognitive performance and race.

Results: Black and White individuals' MMSE scores did not significantly differ ($p > .05$). The mean MMSE performance of White participants (26.40) was less robust than Black participants (27.80).

Findings are inconsistent with current research, indicating that BIPOC individuals are disproportionately impacted by AD, with increased severity of cognitive impairment. There is a profound need for more research in preventative interventions and recruitment of BIPOC individuals who have been historically marginalized in cognitive research trials to help better understand diagnosis, treatment, and prevention of AD in BIPOC.

Conclusions: The observed commensurate global cognitive functioning performance between matched Black and White individuals is not consistent with prior research findings demonstrating increased risk of developing dementia amongst BIPOC. This study's small sample size reflects a significant barrier to detecting clinically meaningful differences. Efforts to address the recruitment crisis, underreporting, cultural influences, and overall mistrust of research among BIPOC is warranted. Inclusive research is critical to dismantling health disparities.

Categories: Dementia (Non-AD)

Keyword 1: apolipoprotein E

Keyword 2: minority issues

Keyword 3: clinical trials

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67 Prospective Memory Accuracy and Speed in Mild Cognitive Impairment and Alzheimer's Disease

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Objective: Prospective memory (PM) is the ability to execute a planned action in the future (e.g., remembering to take medication before going to bed). Prior work has suggested that PM failure can account for 50-80% of reported memory problems. Research has also shown that PM becomes increasingly impaired in the Alzheimer's disease (AD) process. To our knowledge, most PM studies use PM accuracy as a measure of PM performance. However, examining the speed of the response as it relates to the AD process remains relatively unexplored. In this study, we examined both PM accuracy and speed in healthy aging, mild cognitive impairment (MCI), and AD.

Participants and Methods: Participants included healthy older controls (N=65), persons with MCI (N=70), and persons with AD (N=11). The PM task was embedded within a working memory task as PM demands often occur during an ongoing activity in everyday life. For the working memory component of the PM task, participants were shown a series of words and asked to continuously monitor the words while maintaining the last 3 in memory. All words were displayed within 1 of 6 background patterns. For the PM component, participants were asked to press "1" on the keyboard whenever they were shown a particular background pattern on the screen. PM abilities were measured using the median response time and total accuracy.

Results: Age was correlated with PM accuracy. An ANCOVA, controlling for age, and examining the impact of diagnosis on PM accuracy, was significant. Post-hoc tests revealed a trend toward the AD and MCI groups being less accurate than healthy controls. In contrast to accuracy, age was not related to PM speed. An ANOVA examining the impact of diagnosis on PM accuracy found that the AD group responded faster than healthy controls. The MCI group did not show differences in speed from the healthy control and AD groups.

Conclusions: Overall, the pattern of results differed in accuracy and speed of PM performance. There was a trend for the MCI and AD groups being less accurate than the controls, with no difference in performance between the

MCI and AD groups. However, the AD group responded more quickly than the controls, which may have impacted their accuracy. These findings indicate that PM performance differences among groups can be detected by examining speed and not just accuracy. As speed appears to be an essential aspect involved in PM performance, future research should consider incorporating speed as a measure of PM performance when examining PM differences in populations.

Categories: Dementia (Alzheimer's Disease)

Keyword 1: memory: prospective

Keyword 2: reaction time

Keyword 3: dementia - Alzheimer's disease

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68 Bilinguals' Perceived Workloads on The Boston Naming Test

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Objective: The Boston Naming Test (BNT) is a 60-item confrontation naming task requiring participants to name a series of pictures. Prior research has shown that bilingual children have smaller vocabularies than monolinguals and that this effect continues into adulthood. Numerous studies have confirmed that bilingual adults name fewer pictures correctly than monolinguals on the BNT. Research also shows that self-reported workload correlates with neuropsychological test performance and that estimates of workload provide additional information regarding cognitive outcomes. Hardy and Wright (2018) conditionally validated a measure of perceived mental workload called

the NASA Task Load Index (NASA-TLX; Hart & Staveland 1988) with healthy adults on a neuropsychological test (i.e., the Tower of Hanoi). Research also shows that bilinguals report higher perceived workloads on cognitive tasks compared to monolinguals. Although this work has recently extended to other tests, to our knowledge, the workload profile of the BNT remains relatively unexplored. We evaluated BNT performance and perceived workload via the NASA-TLX in monolinguals and bilinguals. We predicted that monolinguals would outperform bilinguals on the BNT, but that bilinguals would report higher workloads.

Participants and Methods: The study sample consisted of 84 healthy participants (36 monolinguals, 48 bilinguals) with a mean age of 28.94 (SD = 10.76). Participants completed the standard 60-item BNT in English. The NASA-TLX scale was utilized to evaluate perceived workload across six subscales. The NASA-TLX was also completed in English after the completion of the BNT. ANOVAs were used to test BNT performance and perceived workload ratings between our language groups.

Results: We found that monolinguals performed better on the BNT compared to bilinguals, $p = .001$, $\eta^2 = .24$. However, bilinguals reported exerting more effort when completing the BNT compared to monolinguals, $p = .002$, $\eta^2 = .11$. Additionally, bilinguals also experienced more frustration when completing the BNT compared to monolinguals, $p = .034$, $\eta^2 = .05$.

Conclusions: As expected, results revealed that monolinguals outperformed bilingual participants on the BNT. However, bilinguals exerted more effort on the BNT and reported the BNT to be more frustrating. A possible reason for bilinguals underperforming and reporting higher perceived workloads on the BNT may be because correct responses were only accepted in English. This may have caused bilingual speakers to exert increased effort to complete the task in a non-native language. In turn, this increased effort likely increased cognitive load and led to higher frustration levels. Further research is needed to confirm our findings and support the idea that bilingualism leads to perceiving greater effort and frustration, and to determine whether there are subgroup differences in BNT performances among bilingual individuals (e.g., English learned as a first language compared to English learned as a second language).