

began to experience impairment in memory and activities of daily living. The cognitive domains were examined using MMSE and MoCA, which showed that the patient had impaired performance in domains related to attention, orientation to time and memory. The attentional system was measured by Attention Network Task – Revised (ANT-R) comprises of three attentional networks that are alerting which prepares for fast response by maintaining an alert state, orienting network which selectively allocates attention to a relevant area of the visual field and executive control which involves planning, making decision, detecting errors and dealing conflict. **Results:** The attentional network scores were calculated and patient score on alerting network was found to be lowest in comparison to orienting and executive control network. **Conclusions:** Overall result showed that the executive control network is inhibited by the alerting network, whereas the orienting network improves the efficiency of the executive control network.

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PREDICTORS OF CHANGE ON NIH TOOLBOX-COGNITION AND COGSTATE BRIEF BATTERY IN A SAMPLE OF AFRICAN-AMERICAN SENIORS WITH COGNITIVE COMPLAINTS



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Background: Limited research exists on practice effects on computerized measures in underserved/underrepresented populations. Understanding what factors influence change scores is essential for interpretation of findings, especially in clinical trials. Here, we examine factors that influence change scores on the CogState Brief and the NIH Toolbox-Cognition batteries in a sample of African Americans seniors with subjective memory complaints. **Methods:** Participants were 76 healthy, community-dwelling African Americans (88% female; age range = 56-98, $M = 71 \pm 6.5$; MMSE range = 24-30) recruited through the Wayne State University Healthier Black Elders Center and the University of Michigan Alzheimer's Disease Center. Consensus diagnosis yielded 46 Normal Control (NC) and 30 Mild Cognitive Impairment (MCI) participants. Tests were administered twice across a four-month interval. Practice effects were assessed by examining relative and absolute reliabilities. Regressions controlling for age, education, diagnosis, pre-post interval, and computer anxiety & self-efficacy were conducted to examine factors that influence change. **Results:** Intraclass correlation coefficients showed an adequate to high degree of relative reliability between assessments for both measures (0.56-0.94), with the exception of Toolbox List Sorting Working Memory and Picture Sequence Memory. Both of these executive measures showed poor relative reliability for MCI (0.26, 0.29) only. Regarding absolute reliability, significant retest changes were found for Toolbox Total and Fluid composites; all Fluid subtests; and, for NC only, CogState Detection and Identification. Regression analyses suggested that the interval between assessments ($p = .0001-.043$), computer self-efficacy ($p = .0001-.003$), computer anxiety ($p = .043$), education ($p = .008-.014$), and diagnosis ($p = .008-$

.046) were significant predictors of change. Interval and computer self-efficacy appeared to have the most influence on change scores, with longer intervals associated with smaller change scores and greater computer self-efficacy associated with larger improvements. **Conclusions:** Both measures showed reasonable reliability in a sample of African Americans with subjective memory complaints, although Fluid Toolbox measures demonstrated the most variability. Overall, these results support the use of computer-based assessments of cognitive change among African American elders, but highlight the importance of accounting for duration between assessments and computer familiarity, particularly for fluid-type tasks.

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WITHDRAWN

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WHAT IS THE POTENTIAL OF CZECH VERSION OF THE FACE-NAME ASSOCIATIVE MEMORY EXAM (CZ-FNAME-12) FOR ASSESSING MEMORY DEFICIT?



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Background: Associative memory is impaired early in Alzheimer's disease (AD). We adapted a challenging associative memory test, a short form of the Face-Name Associative Memory Exam (CZ-FNAME-12). We hypothesized that the CZ-FNAME-12 would differentiate between patients with amnesic mild cognitive impairment (aMCI) and cognitively normal elderly (CN). Next, we hypothesized that the CZ-FNAME-12 would not show a ceiling effect in CN. **Methods:** Twenty-four patients with aMCI ($mean$ MMSE = 27.71 ± 1.33 , $mean$ age = 75 ± 4.56) and twenty-four matched CN ($28.79 \pm .98$, 73.71 ± 4.49) from the Czech Brain Aging Study were defined by comprehensive neuropsychological battery including Rey auditory verbal learning test (RAVLT) and logical memory test (LMT-I). After that, all of them underwent the experimental CZ-FNAME-12. **Results:** There were significant differences between the aMCI and CN groups in the CZ-FNAME-12 scores: 30-minute delay cued recall of names ($p = .001$; Cohen's $d = .92$), 30-minute delay cued recall of occupations ($p < .001$; $d = 1.25$) and composite score of names and occupations learning and recall (Total score; $p < .001$; $d = 1.25$). Area under the receiver operating characteristic curve of Total score was .82 (cut-off 48/96, sensitivity = 79% specificity = 75%). Further analysis of data in CN indicated symmetrical distribution (skewness = $-.4$, kurtosis = 1.54) with no ceiling effect which was not the case of the well-established memory tests (RAVLT, LMT-I). **Conclusions:** The CZ-FNAME-12 differentiates aMCI and CN with a good diagnostic accuracy. Moreover, in CN there was less skewed distribution of the data compared to the well-established memory tests. Absence of the ceiling effect makes the CZ-FNAME-12 a suitable candidate for further studies aimed to detect a subtle cognitive decline in preclinical stages of AD.