

was associated with low sensitivity within this mixed Veteran sample. Further research should focus on replicating findings within other clinical settings, including ones with larger non-credible samples.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: performance validity

Keyword 2: attention deficit hyperactivity disorder

Keyword 3: symptom validity

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9 Four-Year Practice Effects on the RBANS in a Longitudinal Study of Older Adults

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Objective: The Repeatable Battery for the Assessment of Neuropsychological Status (RBANS) is one of the most widely used measures in neuropsychological assessment. Studies of practice effects on the RBANS have largely been limited to studies assessing one or two repeated assessments. The aim of the current study is to examine practice effects across four years after baseline in a longitudinal study of cognitively healthy older adults. Practice effects were estimated using a pseudo-replacement participants approach which has been previously applied in other aging studies.

Participants and Methods: 453 Participants from the Louisiana Aging Brain Study (LABrainS) completed the RBANS Form A on up to four annual assessments after a baseline evaluation. Practice effects were calculated using a modified participants-replacement method where scores of individuals who were administered RBANS Form A multiple times are

compared to the baseline scores of matched participants with additional adjustment for attrition effects.

Results: Practice effects were observed primarily in the immediate memory, delayed memory, and total score indices. For example, an increase of nearly half a standard deviation was observed for delayed memory.

Conclusions: These findings extend past work on the RBANS and other neuropsychological batteries more broadly in showing the susceptibility of memory measures to practice effects. Given that memory and total score indices of the RBANS have the most robust relationships with diagnostic status and biomarkers for pathological cognitive decline, these findings raise concerns about the ability to recruit those at risk for decline from longitudinal studies using the same form of the RBANS for multiple years.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: assessment

Keyword 2: aging (normal)

Keyword 3: psychometrics

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10 The Impact of Performance and Symptom Invalidity on Relationships Between Subjective and Objective Cognitive Functioning

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Objective: Inconsistent relationships between subjective and objective performance have been found across various clinical groups. Discrepancies in these relationships across studies have been attributed to various factors such as patient characteristics (e.g., level of insight associated with cognitive impairment) and test characteristics (e.g., using too few measures to assess different cognitive domains). Although performance and symptom invalidity are common in clinical and research settings and have the potential to impact responding on testing, previous studies have not explored the role of performance and symptom invalidity on relationships between objective and

subjective performance. Therefore, the current study examined the impact of invalidity on performance and symptom validity tests (PVTs and SVTs, respectively) on the relationship between subjective and objective cognitive functioning.

Participants and Methods: Data were obtained from 299 Veterans (77.6% male, mean age of 48.8 years (SD = 13.5)) assessed in a VA medical center epilepsy monitoring unit from 2008-2018. Participants completed a measure of subjective functioning (i.e., the Patient Competency Rating Scale), PVTs (i.e., Word Memory Test, Test of Memory Malingering, Reliable Digit Span), SVTs (i.e., Minnesota Multiphasic Personality Inventory-2-Restructured Form Response Bias Scale, Structured Inventory of Malingered Symptomatology), and neuropsychological measures assessing objective cognitive performance (e.g., Trail Making Test parts A and B). Pearson correlations were conducted between subjective functioning and objective cognitive performance in the following groups: 1.) PVT and SVT valid, 2.) PVT and SVT invalid, 3.) PVT-only invalid, 4.) SVT-only invalid. Using Fisher's r-to-z transformation, tests for the differences between correlation coefficients were then conducted between the PVT and SVT valid vs. PVT and SVT invalid groups, and the PVT-only invalid vs. SVT-only invalid groups.

Results: Participants with fully valid PVT and SVT performances demonstrated generally stronger relationships between subjective and objective scores (r 's = .058 - .310) compared to participants with both invalid PVT and SVT scores (r 's = -.033 - .132). However, the only significant difference in the strengths of correlations between the groups was found on Trail Making Test Part B (p = .034). In separate exploratory analyses due to low group size, those with invalid PVT scores only (fully valid SVT) demonstrated generally stronger relationships between subjective and objective scores (r 's = -.101 - .741) compared to participants with invalid SVT scores only (fully valid PVT; r 's = -.088 - .024). However, the only significant difference in the strengths of correlations between the groups was found on Trail Making Test Part A (p = .028).

Conclusions: The present study suggests that at least some of the discrepancies in previous studies between subjective and objective cognitive performance may be related to performance and symptom validity. Specifically, very weak relationships between objective and

subjective performance were found in participants who only failed SVTs, whereas relationships were stronger in those who only failed PVTs. Therefore, findings suggest that including measures of PVTs and SVTs in future studies investigating relationships between subjective and objective cognitive performance is critical to ensuring accuracy of conclusions that are drawn.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: cognitive functioning

Keyword 2: self-report

Keyword 3: validity (performance or symptom)

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11 NASA-TLX Workload Profile of the Trail Making Test

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Objective: Workload is a useful construct in human factors and neuroergonomics research that describes "the perceived relationship between the amount of mental [and physical] processing capability or resources and the amount required by the task". We apply this concept to neuropsychology and assess several dimensions of workload as it relates to performance on the Trail Making Test.

Participants and Methods: Twenty college students completed the Trail Making Test (TMT). After completion of each Part A and B, workload was assessed with the NASA-Task Load Index (NASA-TLX), a popular self-report measure of workload including subscales: Mental Demand, Physical Demand, Temporal Demand, Performance, Effort, and Frustration, with an overall average total score as well.

Results: Completion time differed of course between Parts A and B (p < .001). Of more interest, overall workload differed between TMT A (M = 20.33, SD = 13.32) and TMT B (M = 35.79, SD = 17.37) (p < .001, h^2 = .68). The