

Objective: Performance validity (PVT) and symptom validity tests (SVT) have become standard practice in assessing credibility of neuropsychological profiles and symptom report. While PVTs assess cognitive task engagement, SVTs assess credibility of patient symptom report. Although prior research aimed to conceptualize the relationship between the two validity measure types, it generally focused on SVTs from the Minnesota Multiphasic Personality Inventory (MMPI-2 &RF) and the Structured Inventory of Malingered Symptoms (SIMS; Ord et al., 2021, MMPI-2; Van Dyke et al., 2013). Further studies have demonstrated mixed results, with many studies concluding that symptom and performance validity are separate but related constructs. The current study aimed to assess the relationship between PVTs and SVTs utilizing symptom validity measures from the Personality Assessment Inventory (PAI) across three samples, including neurodevelopmental, psychiatric, and traumatic brain injury groups.

Participants and Methods: Participants included 634 individuals consecutively referred for neuropsychological assessment who completed the Test of Memory Malingering (TOMM) and the PAI (mean Age = 41.7, SD = 15.7; mean Education = 13.7, SD = 2.7; 53% female; 89% Caucasian). Participants were divided into three groups based on referral, including neurodevelopmental (mean Age = 26.6, SD = 10.7; mean Education = 13.4, SD = 2.5; 39% female; 79% Caucasian), psychiatric (mean Age = 44.7, SD = 15.0; mean Education = 13.8, SD = 2.8; 58% female; 90% Caucasian), and traumatic brain injury samples (mean Age = 42.7, SD = 15.5; mean Education = 13.3, SD = 2.3; 50% female; 91% Caucasian). Four structural equation models (latent variable models) were constructed. The first model was fit across the entire sample while the remaining three were fit for the aforementioned subsamples. TOMM trials modeled the performance validity latent variable while SVTs from the PAI modeled the symptom validity latent variable (Positive Impression Management and Defensiveness Index modeled underreporting; Negative Impression Management, Malingering Index, and Cognitive Bias Scale modeled overreporting).

Results: In the full sample model overreporting significantly predicted performance validity ($p < 0.001$, $r = -0.31$), indicating higher symptom overreporting related to poorer performance validity while symptom underreporting did not

significantly predict performance validity ($p = 0.09$, $r = 0.08$). In the neurodevelopmental model overreporting did not significantly predict performance validity ($p = 0.44$, $r = 0.10$). Further, symptom underreporting did not significantly predict performance validity ($p = 0.40$, $r = 0.10$). Similarly, for the TBI model, overreporting did not significantly predict performance validity ($p = 0.82$, $r = -0.02$) and symptom underreporting did not significantly predict performance validity ($p = 0.50$, $r = -0.08$). For the psychiatric sample symptom underreporting did not significantly predict performance validity ($p = 0.06$, $r = 0.11$); however, symptom overreporting significantly predicted performance validity ($p < 0.001$, $r = -0.39$).

Conclusions: The current study expands on prior research comparing the relationship between SVTs and PVTs in neuropsychological evaluation utilizing SVTs from the PAI. Results of the present study suggest the relationship between the SVTs and PVTs varies by referral type and further supports using both PVTs and SVTs in neuropsychological assessment.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: symptom validity

Keyword 2: assessment

Keyword 3: performance validity

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30 Examining the Base Rates of Low Scores in Older Adults with Subjective Cognitive Impairment from a Specialist Memory Clinic

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Objective: Cognitively healthy individuals who complete a neuropsychological test battery can obtain very low scores. These very low scores are not likely indicative of cognitive impairment but are rather considered spuriously low scores. The expected number of low scores varies based on number and type of neuropsychological tests. Typically, base rates have been determined from normative samples,

which could differ from samples seen in clinical settings. The current study reports on base rates of spuriously low cognitive scores in older adults presenting to a memory clinic who were diagnosed with subjective cognitive impairment after interprofessional assessment and information from collateral informants ruled out objective cognitive impairment.

Participants and Methods: Base rates of spuriously low scores for a neuropsychological battery of 12 scores were based on 92 cognitively healthy older adults presenting to a specialist memory clinic ($M(\text{age}) = 61.00$, $SD = 12.00$; $M(\text{edu}) = 12.00$, $SD = 2.74$). Crawford's Monte Carlo simulation algorithm was used to estimate multivariate base rates by calculating the percentage of cognitively healthy memory clinic patients who produced age and education normed scores at or below the 5th percentile. The following tests were used to produce the 12 scores: block design, digit span backwards, and coding from the WAIS-IV; logical memory I and II from the WMS-IV; immediate and delayed memory scores from the California Verbal Learning Test Second Edition short form; immediate and delayed memory scores from the Brief Visuospatial Memory Test Revised; category switching, letter number sequencing, and inhibition switching from the Delis Kaplan Executive Functioning System.

Results: An estimated 33.58% of the cognitively healthy memory clinic population would have one or more low scores (5th percentile cutoff), 14.7% would have two or more low scores, 6.55% would have three or more, 2.94% would have four or more, and 1.31% percent would have 5 or more very low scores due to chance.

Conclusions: Determining base rates of spuriously low scores on a neuropsychological battery in a clinical sample of referred older adults with subjective memory complaints could assist in the diagnostic process. By understanding base rates of clinical samples, clinicians can use empirical data to adjust for expected low scores rather than using conventional corrections (such as 1/20 test scores expected to be low). In a memory clinic sample, three or more low test scores out of 12 is expected to be relatively rare in those who were later determined to have no objective evidence of cognitive impairment based on interprofessional assessment. Understanding normal frequency of low scores will prevent undue conclusions of cognitive impairment which will minimize false positives in diagnosis.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: assessment

Keyword 2: neuropsychological assessment

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31 The ADHD Dissimulation Scale (Ds-ADHD) on the MMPI-2-RF versus Established MMPI-2-RF Validity Scales

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Objective: The MMPI-2-RF contains scales that assess different types of invalid response styles, especially potential symptom over-reporting (e.g., F-r, Fs, Fp-r, FBS-r, RBS). However, these scales are not designed to specifically capture noncredible symptoms reports associated with Attention-Deficit / Hyperactivity Disorder (ADHD). Robinson & Rogers (2018) proposed the experimental Dissimulation ADHD validity scale (Ds-ADHD) on the MMPI-2-RF that was effective in distinguishing credible and non-credible ADHD diagnoses via a simulator-based study. Within the current study, the Ds-ADHD scale was compared to the established MMPI-2-RF validity scales within a mixed sample of U.S. Military Veterans.

Participants and Methods: 173 Veterans ($M(\text{age}) = 36.18$, $SD(\text{age}) = 11.10$, $M(\text{edu}) = 14.01$, $SD(\text{edu}) = 2.11$, 88% male, 81% White, 17% Black) completed a neuropsychological evaluation which included an internally consistent MMPI-2-RF profile and up to 10 performance validity tests (PVTs) as well as a question about a possible ADHD diagnosis. The credible group was determined if participants passed all PVTs ($n=146$) and completed at least 2 PVTs. The non-credible group was determined by failing two or more PVTs ($n=27$). Group assignment was clinically confirmed. The Ds-ADHD scale was calculated according to Robinson & Rogers' (2018); responses of "true" (i.e., erroneous stereotypes) were coded as 1 and "false" answers were coded 2, creating a 10- to 20-point scale. Thus,