

Medical School, Ann Arbor, MI
hakohl@umich.edu

20 Clinical Utility of an Experimental Ds-ADHD Validity Scale in Detection of Feigned ADHD symptoms in a U.S. Military Population

Holly R Winiarski, Timothy J Arentsen, Marcy C Adler, Christopher T Burley, Katie M Califano, Jennifer S Seeley-McGee, Brad L Roper
Memphis VA Medical Center, Memphis, TN, USA

Objective: Accurate identification of Attention-Deficit / Hyperactivity Disorder (ADHD) is complicated by possible secondary gain, overlap of symptoms with psychiatric disorders, and face validity of measures (Suhr et al., 2011; Shura et al., 2017). To assist with diagnostic clarification, an experimental Dissimulation ADHD scale (Ds-ADHD; Robinson & Rogers, 2018) on the MMPI-2 was found to distinguish credible from non-credible respondents defined by Performance Validity Test (PVT)-based group assignment in Veterans (Burley et al., 2023). However, symptom and performance validity have been understood as unique constructs (Van Dyke et al., 2013), with Symptom Validity Tests (SVTs) more accurately identifying over-reporting of symptoms in ADHD (White et al., 2022). The current study sought to evaluate the effectiveness of the Ds-ADHD scale using an SVT, namely the Infrequency Index of CAARS (CII; Suhr et al., 2011), for group assignment within a mixed sample of Veterans.

Participants and Methods: In this retrospective study, 187 Veterans ($M_{age} = 36.76$, $SD_{age} = 11.25$, $M_{edu} = 14.02$, $SD_{edu} = 2.10$, 83% male, 19% black, 78% white) were referred for neuropsychological evaluation of ADHD and administered a battery that included internally consistent MMPI-2 and CAARS profiles.

Veterans were assigned to a credible group ($n=134$) if CII was <21 or a non-credible group ($n=53$) if CII was ≥ 21 . The Ds-ADHD scale was calculated for the MMPI-2. Consistent with Robinson and Rogers (2018), “true” answers (i.e., erroneous stereotypes) were coded as 1 and “false” answers were coded as 2, creating a 10- to 20-point scale. Lower scores were associated with a higher likelihood of a feigned ADHD presentation.

Results: Analyses revealed no significant differences in age, education, race, or gender ($ps > .05$) between credible and non-credible groups. An ANOVA indicated a significant difference between groups ($F[1,185] = 24.78$, $p < .001$; Cohen’s $d = 0.80$) for Ds-ADHD raw scores. Veterans in the non-credible group reported more “erroneous stereotypes” of ADHD (M raw score = 13.23, $SD = 2.10$) than those in the credible group ($M = 14.94$, $SD = 2.13$). A ROC analysis indicated AUC of .72 (95% CI = .64 to .80). In addition, a Ds-ADHD cut score of <12 resulted in specificity of 94.5% and sensitivity of 22.6%, whereas a cut score of <13 resulted in specificity of 85.8% and sensitivity of 50.9%. When analyzing other CII cut scores recommended in the literature, results were essentially similar. Specifically, analyses were repeated when group assignment was defined by cut score of $CII < 18$ and by removing an intermediate group ($CII = 18$ to 21 ; $n=24$).

Conclusions: The Ds-ADHD scale demonstrated significant differences between credible and non-credible respondents in a Veteran population. Results suggest a cut score of <12 had adequate specificity (.95) with low sensitivity (.23). This is consistent with findings using PVTs for group assignment that indicated a cut score of <12 had adequate specificity (.92) with low sensitivity (.19; Burley et al., 2023). Taken together, findings suggest that the Ds-ADHD scale demonstrates utility in the dissociation of credible from non-credible responding. Further research should evaluate the utility of the scale in other clinical populations.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: attention deficit hyperactivity disorder

Keyword 2: validity (performance or symptom)

Correspondence: Holly R. Winiarski, Memphis VA Medical Center, hollypax10@gmail.com

21 A Comparison of the Memory and Non-Memory Based Performance Validity Measures for Detecting Invalid Neuropsychological Test Performance among Individuals with and without Memory Impairment