

individuals with credible performance (Mean Age = 35.5, SD = 8.8; Mean Edu = 13.6, SD = 2; Mean Est. IQ = 106, SD = 7.9) and 94 individuals with psychometrically determined non-credible performance (Mean Age = 38.5, SD = 9.4; Mean Edu = 113, SD = 2.1; Mean Est. IQ = 101, SD = 8.7). Performance of COWAT and animals in detecting non-credible performances was evaluated through calculation of classification accuracy statistics and use of the logistic regression formulas reported in Sugarman and Axelrod (2015).

Results: For COWAT, the optimal cutoff was a raw score of ≤ 27 (specificity = 89%; sensitivity = 31%), and a T-score of ≤ 35 (specificity = 92%; sensitivity = 31%). For animal naming, optimal cutoffs were ≤ 16 for raw score (specificity = 92%, sensitivity = 38%) and ≤ 37 for T-score (specificity = 91%; sensitivity = 33%). The logistic regression formula based on raw scores for both COWAT and animal naming was inadequately sensitive at the recommended cutoff in this sample, but a coefficient of $\geq .28$ was revealed to be optimal (91% specificity; 42% sensitivity). When the formula for T-scores was used, a coefficient of $\geq .38$ was optimal (91% specificity; 28% sensitivity).

Conclusions: Results of the current research suggest that PVTs embedded within the commonly administered COWAT and animal naming verbal fluency tests can effectively detect low effort, in concordance with generally accepted standards. A logistic regression formula using raw scores in particular appears to be most effective, consistent with findings reported by Sugarman and Axelrod (2015).

Categories: Forensic

Neuropsychology/Malingering/Noncredible Presentations

Keyword 1: performance validity

Keyword 2: effort testing

Keyword 3: fluency

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86 The Examination Between Credible and Non-Credible Groups on Embedded PVT Tests

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Objective: Performance validity tests (PVTs) are included in neuropsychological testing to ensure examinees are performing to the best of their abilities. There are two types of PVTs: embedded and free standing. Embedded PVTs are tests that are derived from standard neuropsychological tests of various cognitive domains. Freestanding PVTs are tests that are designed with the intention of being a PVT. Research studies show that undergraduate samples do not always performed to the best of their abilities. The purpose of this study was to cross-validate previous research on the topic of performance validity in a college sample. It was predicted that the non-credible group would demonstrate higher failure rates on embedded PVTs compared to the credible group.

Participants and Methods: The sample consisted of 198 neurologically and psychologically healthy undergraduate students with a mean age of 19.69 (SD = 2.11). Participants were broken into two groups: non-credible (i.e., participants that failed two or more PVTs) and credible (i.e., participants that did not failed two or more PVTs). The Rey-Osterrith copy test, Comalli Stroop part A (CSA), B (CSB), and C (CSC), Trail Making Test part A and B, Symbol Digit Modalities Test written (SDMT-W) and oral (SDMT-O) parts, Controlled Oral Word Association Test (COWAT) letter fluency, and Finger Tapping Test were used to evaluate failure rates in our sample. PVT cutoff scores were use from previously validated in the literature. Chi-square analysis was used to evaluate failure rates between the groups.

Results: Chi-square analysis revealed significant failure rate differences between groups on several PVTs. Results revealed that 15% of the non-credible group failed the CSA compared to 1% of the credible group, $X^2=14.77$, $p=.000$. Meanwhile, 26% of the non-credible group failed the CSB compared to 2% of the credible group, $X^2=24.72$, $p=.000$. Furthermore, results showed that 11% of the non-credible group failed the CSC compared to 1% of the credible group, $X^2=13.05$, $p=.000$. Next, 48% of the non-credible group failed the Trail Making Test part A compared to

8% of the credible group, $X^2=31.61$, $p=.000$. We also found that 15% of the non-credible group failed the SDMT-W part compared to 1% of the credible group, $X^2=19.18$, $p=.000$. Meanwhile, on the SDMT-O part 19% of the non-credible group failed compared to 1% of the credible group, $X^2=25.52$, $p=.000$. On the COWAT letter fluency task 74% of the non-credible group failed compared to 19% of the credible group, $X^2=36.90$, $p=.000$. Finally, results revealed on the Finger Tapping Test 19% of the non-credible group failed compared to 3% of the credible group, $X^2=10.01$, $p=.002$.

Conclusions: As expected, the non-credible participants demonstrated significantly higher PVT failure rates compared to credible participants. A possible explanation driving higher failure rates in our sample can be due to cultural variables (e.g., bilingualism). It was suggested by researchers that linguistic factors may be impacting higher PVT failure rates and developing a false-positive error. Future research using undergraduate samples need to identify which PVT's are being impacted by linguist factors.

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Keyword 3: malingering

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87 Examining the use of the Embedded Performance Validity Test in the Brief Visuospatial Memory Test-Revised Among Spanish-Speaking Patients

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Objective: The Brief Visuospatial Memory Test-Revised (BVMT-R) Recognition Discrimination (RD) index has emerged as an embedded performance validity test (PVT). However, there do not appear to be any studies that have examined its utility in Spanish-speaking samples. This pilot study examined the classification accuracy of the BVMT-R RD for detecting performance invalidity in a Spanish-speaking forensic sample.

Participants and Methods: This cross-sectional study utilized a sample of 89 Spanish speakers that were administered the BVMT-R during an outpatient neuropsychological evaluation. Out of the 89 Spanish speakers, 43 were subjects in litigation, 32 were neurological patients evaluated for clinical purposes, and 14 were healthy controls. The sample was 67% male/33% female, 53% South American, 33% Caribbean (Dominican, Puerto Rican, Cuban), 10% Central American, 3% North American (Mexican), and 1% Spanish, with a mean age of 44.2 years ($SD = 14.2$; range = 20-78) and mean education of 11 years ($SD = 3.7$; range = 0-20). Test administration for each patient was completed in Spanish by a fluent, Spanish-speaking examiner. In total, 64/89 (72%) were classified as valid and 25/89 (28%) as invalid based on performance across the Test of Memory Malingering (TOMM), at least one additional PVT (Rey-15 item memory test; Rey Dot Counting Test; Reliable Digit Span; WHO-AVLT recognition trial) and objective diagnostic criteria identifying invalid performance. Analyses included three univariate analyses of variance (ANOVA), with the groups (healthy vs neurological vs litigation) as independent variables and performance on BVMT-RD as the dependent variable.

Results: Statistically significant differences among the groups were found $F(2,86)=8.32$, $p < .001$. Post-hoc analysis (Scheffe test) showed the mean of the litigation group to be significantly lower than the means of the other two groups (healthy and neurological), which showed no difference between them. An ANOVA with validity groups as the fixed factor and BVMT-R RD index as the dependent variable was significant $F(1,85)= 21.02$, $p < .001$. Results of a ROC curve analysis yielded statistically significant AUC (.794). The optimal cut-score was BVMT-R RD ≤ 5 (48% sensitivity/88% specificity).

Conclusions: Results of the BVMT-R RD index in this Spanish-speaking population differed by subgroup, with worse performance seen in