Categories: Forensic

Neuropsychology/Malingering/Noncredible

Presentations

**Keyword 1:** performance validity **Keyword 2:** forensic neuropsychology

Keyword 3: effort testing

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## 81 An Examination of a Multiple Cutoff Performance Validity Index

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**Objective:** Recent consensus guidelines have advocated for the use of multivariate performance validity assessment on abilitybased measures such those used in neuropsychological assessment. Further, previous research has demonstrated that aggregating performance validity indicators may produce superior classification accuracy. The present study builds upon this research by aggregating data from three of the most commonly used performance validity measures (Test of Memory Malingering [TOMM], Rev Fifteen Item Test with recognition trial [FIT plus recognition], and Reliable Digit Span [RDS]) to create a performance validity composite measure in a veteran mild traumatic brain injury (mTBI) population.

Participants and Methods: Data of patients evaluated at a VA hospital who had completed the RDS, FIT plus recognition, and TOMM as part of their clinical neuropsychological evaluation were analyzed (n = 20). Two composite performance validity indexes were created: a Single Cutoff Performance Validity Index (SC-PVI), which measures the quantity of failures across performance validity measures (PVMs) by summing the total number of PVM failures, and a Multiple Cutoff Performance Validity Index (MC-PVI) which measures the number of failures as well as degree of failure(s) across measures of performance validity (e.g., a participant would attain a score of 3 if their PVM performance failed to reach a conservative cut point; they would obtain a score of 1 if they met conservative cut point, yet failed to reach a liberal cut point).

**Results:** Only one participant (5%) attained a score of 0 on the SC-PVI (i.e., passing all PVTs using standard cutoffs) and MC-PVI (i.e., passing the most liberal cut points on all three PVMs). Conversely, eight participants (40%) attained a score of 3 on the SC-PVI (i.e., failed all three PVMs) and four participants (20%) attained a score of 9 (i.e., failed the most conservative cut points on all three PVMs). Results showed a significant (p < .001) ordinal association between the two indices (G = .984); however, there was no significant agreement between SC-PVI and MC-PVI models (K = -.087; p = .127).

**Conclusions:** Data revealed discordant findings between the three PVMs utilized. The majority of participants (75%) scored between 2-8 on the MC-PVI, meaning that they did not exceed all liberal cut points or fail all conservative cut points. These "grey area" scores suggest an indeterminate range of performance validity, which cannot be captured by a solitary cut point or neatly classified as pass or fail. The utility of multiple cutoff performance validity models (i.e., aggregating PVMs to consider the severity of failure and number of failures) is that they capture the nuance of these data when determining and discussing the credibility of a profile. Multiple cut point data also highlight how the choice of cutoff influences the outcome of performance validity research and clinical decision making. As such, future research on the classification accuracy of this MC-PVI is needed.

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82 Single Errors on Trial 1 of the Test of Memory Malingering may be Indicative of Invalid Performance on Neuropsychological Measures in a Sample of Youth Athletes