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Author's Update to "Detection of malingering"

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Editor's Note: This update file comments upon events and research available after the publication of "Detection of malingering on the Halstead-Reitan Battery: A Cross-validation" (McKinzey & Russell, 1997a). This is the first update.

Abstract

Since the 1997 publication of "Detection of malingering on the Halstead-Reitan Battery: A Cross-validation" another relevant article has become available and is reviewed.

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In 1996, Wiley Mittenberg published the validation of a formula for the detection of malingering on the Halstead-Reitan Battery (Mittenberg, Rotholc, Russell, & Heilbronner, 1996). In 1997, we partially cross-validated the formula (McKinzey & Russell, 1997a) on a large, varied sample of patients with no reason to malingering. We found the formula to have high false positive rates. Since then, no one has studied the formula further, so the cross-validated false negative rate remains unknown.

For the first time, Mittenberg has commented on our study (Mittenberg, Aguila-Puentes, Patton, Canyock, & Heilbronner, 2002):

McKinzey and Russell (1997) cross-validated the discriminant function on a sample of 120 non-compensation seeking head injured patients and found 77.5% accurate diagnosis. This accuracy rate is lower than previously reported, but may be viewed as supporting the utility of the procedure. As is generally the case, a higher rate of confidence (87.5%) was associated with a more extreme score on the measure. Of 158 neurologically normal persons, 96.8% were not impaired on the HRB and obviously therefore could not be identified as not malingering impairment on the basis of reason and common sense. Questions about the validity of apparent cognitive impairment do not arise when no cognitive impairment is evident. Misuse of the discriminant function in these cognitively intact patients correctly identified 84% of the group as not malingering cognitive impairment. Patients with diagnoses other than head trauma (particularly schizophrenia and cerebrovascular disease) were misclassified more frequently, consistent with the predictable observation that distinct patterns of HRB performance characterize these disorders. Careful reading of the Mittenberg et al. (1996) study suggests that this diagnostic procedure was designed for the identification of malingered head injury (rather than other conditions) on the Halstead-Reitan Battery. Methods that do not rely on profile analysis to detect exaggeration are not disadvantaged by specificity to a given condition.

Mittenberg thus agrees that his formula should not be used in conditions other than head injury, nor with normal HRBs. He does not report another cross-validation, so the cross-validated false negative rate (that is, how many malingerers are missed) remains unknown. Raising the cut score to .39, as he suggests in this review, will naturally increase the false negative rate.

In another article reviewing an HRB formula to detect malingering (McKinzey & Russell, 1997b) we argued that both formulas had insufficiently adjusted for severity of impairment, and the methods derived were simply capitalizing on differences in severity between samples. If the Mittenberg's validation is redone, it should match the participants on the Average Impairment Rating rather than the Impairment Index, and use age and education norms such as Heaton's (Heaton, Grant, & Matthews, 1991).

References

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