The MMPI-2-RF over-reporting scales in clinical practice: A meta-analysis of criterion-based classification

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Introduction

The MMPI-2-RF is a popular personality assessment tool with an amassed literature base suggesting its usefulness and validity as a measure of symptom sets and response styles. It includes several validity scales measuring content-based internal validity in order to identify malingerers. Most of these scales were revised versions of scales already included in the MMPI-2 (i.e., F-, Fp-, and FBS). However, the RBS (Gervais et al., 2007) and F (Wygant, Ben-Porath, & Arbisi, 2004) scales were not included to either strengthen under-assessed areas of over-reporting (somatic complaints in Fp) or to provide an alternative approach to identifying malingerers (excessive failure of external validity testing in RBS).

Methods

Random-effect models generate the most accurate meta-analytic estimates (Borenstein et al., 2009) while fixed-effect models are likely biased and unreliable in their approximation. Thus, results from each of these two meta-analyses are limited in their utility. Ingram and Ternes (2017) did not offer comparative means for groups to ease clinical use of the MMPI-2-RF and also combined simulation and clinical samples. Sharf and colleagues (2017) used an inappropriate meta-analytic assumption while also combing simulation and criterion-based studies (as well as a non-faking study).

Discussion

Given that a bedrock of utility for personality assessment measures is that they can effectively discriminate between patterns of valid and invalid responding, two meta-analyses have evaluated the effectiveness of these over-reporting scales. Ingram and Ternes (2017) used a random-effects meta-analysis model with both simulation and clinically-derived studies. They found support for the efficacy of the over-reporting scale and numerous moderators which influenced the effectiveness for those scales (e.g., presenting diagnosis, comparison group, simulation or clinically drawn data, etc.). Sharf, Pilkonis, Williams, and Henry (2017) used a fixed meta-analytic approach to examine the over-reporting scales, also in both simulation and clinically-drawn samples. Sharf and colleagues reported mean scores and effect sizes for identified diagnoses and feigned symptom groups (feigned mental disorders, cognitive disorders, and medical complaints).

The MMPI-2-RF effectively distinguishes between honest and feigned over-reporting in many cases. However, there are several important caveats to this finding. 1. A medium effect (i.e., a classification involving group difference effects between 1.25 and 2.69; Ferguson, 2009) is believed the most apt label for the between group differences seen within this meta-analysis. While the effects (i.e., score differences) are reliable in magnitude, the mean and distribution of the feigning group tends to fall under the scale scores traditional and conservative recommended scores to identify feigners. Group comparison effect size guidelines are frequently substantially higher and are likely to result in decreased identification cut-scores. The difference between the groups is also smaller than desired when standard deviations of each group (feigning and honest) are considered.

2. The discriminative capacity of the over-reporting scales is likely to misclassify many feigning individuals (false negative) because of low mean scores. Use of non-standard interpretive means such as those reported here or by Sharf and colleagues (2017) would likely lead to higher false positive misclassification due to the highly standard deviations. Those exceeding traditional cut-score recommendations are likely to be positively identified.

3. Performance on validity scales and, subsequently, the effectiveness of those scales, will vary according to different clinical contexts.

4. Effectiveness of the over-reporting scales relies primarily on disability and litigant samples, which means that the assessment of over-reported psychopathology (i.e., Fp-r) is not adequately assessed in this (or other) meta-analyses of the MMPI-2-RF.

5. There are few unpublished studies which limits assessment of publication bias.

6. Use of groups where the certainty about feigning was high best captures the effectiveness of the simulation and comparison groups, which means that the assessment of over-reported psychopathology (i.e., Fp-r) is not adequately assessed in this (or other) meta-analyses of the MMPI-2-RF.