False Feigners, Continued: An Examination of the Impact of Mixed Responding on MMPI-2-RF Content-Based Validity Scales

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Introduction

- The MMPI-2-RF includes Validity Scales designed to detect non-content-based (e.g., random, fixed) and content-based (e.g., overreporting, underreporting) invalid responding.
- Previous research examined the frequency of “false feigners”—individuals incorrectly identified as under- or overreporting when actually responding in a random, acquiescent, or counter-acquiescent manner.
- Concerns regarding undetected mixed responding on the MMPI-A-RF led to the development of Combined Response Inconsistency (CRIN)−a supplement to VRIN-r and TRIN-r that is scored by summing raw VRIN-r, TRIN-r True, and TRIN-r False scores.
- Previous research found support for the incremental utility of an MMPI-2-RF CRIN in the detection of mixed responding.

Aims & Hypotheses

There is a gap in the literature examining the influence of mixed responding on MMPI-2-RF content-based Validity Scales.

Hypotheses

- Based on Burchett et al. (2016), we hypothesized mixed responding would elevate mean scores on F-r, Fp-r, Fs, RBS, and L-r.
- We did not expect an impact on FBS or K-r means.
- We anticipated screening with VRIN-r and TRIN-r would decrease ‘false feigner’ misclassifications and we explored the incremental utility of screening with CRIN.

Method

- We inserted computer-generated mixed responses into a forensic inpatient sample with no elevations on MMPI-2-RF Validity Scales.
  - Six datasets with 40% generated mixed responding were created.
  - Dividing participant items into 3 equal parts, we replaced 40% of items in each third of the test with acquiescent (A), counter-acquiescent (C), or random (R) responses (ACR, ARC, CAR, CRA, RAC, RCA).
- We examined mean scores for content-based Validity Scales. We also examined the frequency of elevations on each overreporting and underreporting scale:
  1. Without screening for non-content-based invalidity
  2. After screening with VRIN-r and TRIN-r
  3. Adding CRIN to screen invalid protocols on

Results & Discussion

- Mixed responses led to notable increases in content-based Validity Scale score means.
  - Fp-r, Fs, and F-r exhibited the greatest elevation changes.
  - FBS-r, RBS, and L-r exhibited moderate increases in mean scores while K-r means remained in the normative range.
- Few content-based Validity Scales exhibited elevations to interpretive thresholds.
  - A notable exception was Fp-r, with 10-24% elevating to 100T or higher.
  - This impact was mitigated when VRIN-r and TRIN-r were used to screen for invalid responding, reducing the number of protocols flagged by F-p to 4-12%.
  - Adding CRIN, the F-p ‘false feigner’ rate was further reduced to 2-10%.
  - Fs also exhibited some elevations. Fs may be particularly impacted by RAC mixed responding.
- This was the first study to examine the impact of computer-generated mixed responding on the MMPI-2-RF content-based Validity Scales.
- 40% may have been too low to be sensitive to the impact of mixed responding. Future studies should examine results for the full spectrum of 0-100% inserted mixed responses.

Table 1: MMPI-2-RF Content-Based Validity Scale Means for Original and 40% Mixed Response Insertion Conditions (N = 156)

<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>ACR</th>
<th>ARC</th>
<th>CAR</th>
<th>CRA</th>
<th>RAC</th>
<th>RCA</th>
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<tr>
<td>F-r</td>
<td>55.71</td>
<td>76.70</td>
<td>72.14</td>
<td>80.00</td>
<td>84.65</td>
<td>74.89</td>
<td>83.35</td>
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<tr>
<td>Fp-r</td>
<td>51.72</td>
<td>78.78</td>
<td>80.59</td>
<td>88.10</td>
<td>85.83</td>
<td>84.36</td>
<td>83.52</td>
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<tr>
<td>Fs</td>
<td>52.82</td>
<td>64.47</td>
<td>76.53</td>
<td>83.24</td>
<td>74.57</td>
<td>86.69</td>
<td>62.22</td>
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<tr>
<td>FBS-r</td>
<td>50.32</td>
<td>62.88</td>
<td>61.13</td>
<td>56.24</td>
<td>58.79</td>
<td>58.26</td>
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<tr>
<td>RBS</td>
<td>51.85</td>
<td>70.00</td>
<td>67.57</td>
<td>62.55</td>
<td>63.87</td>
<td>64.16</td>
<td>66.89</td>
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<tr>
<td>L-r</td>
<td>51.90</td>
<td>60.31</td>
<td>58.20</td>
<td>59.81</td>
<td>59.42</td>
<td>58.43</td>
<td>60.60</td>
</tr>
<tr>
<td>K-r</td>
<td>50.13</td>
<td>46.65</td>
<td>47.02</td>
<td>52.74</td>
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</tr>
</tbody>
</table>

Figure 1: MMPI-2-RF Content-Based Validity Scale Clinical Elevation Frequencies Due to 40% Mixed Response Insertion (N = 156)

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References


Acknowledgements

This research was made possible by support from a grant from the University of Minnesota Press. Test Division—which supported data collection—and the California State University, Monterey Bay Undergraduate Research Opportunity Center (UROD)—which provided additional financial, logistical, and mentorship support. This research was approved by the California Human Services Agency Committee for the Protection of Human Subjects. The statements and opinions expressed are those of the authors and do not constitute the official views or the official policy of DSH-Patton, The California Department of State Hospitals, or the State of California.