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# 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 underor overreporting when actually responding in a random, acquiescent, or counter-acquiescent manner<sup>3</sup>.
- 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<sup>1</sup>.
- Previous research found support for the incremental utility of an MMPI-2-RF CRIN in the detection of mixed responding<sup>5/6</sup>.

## 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

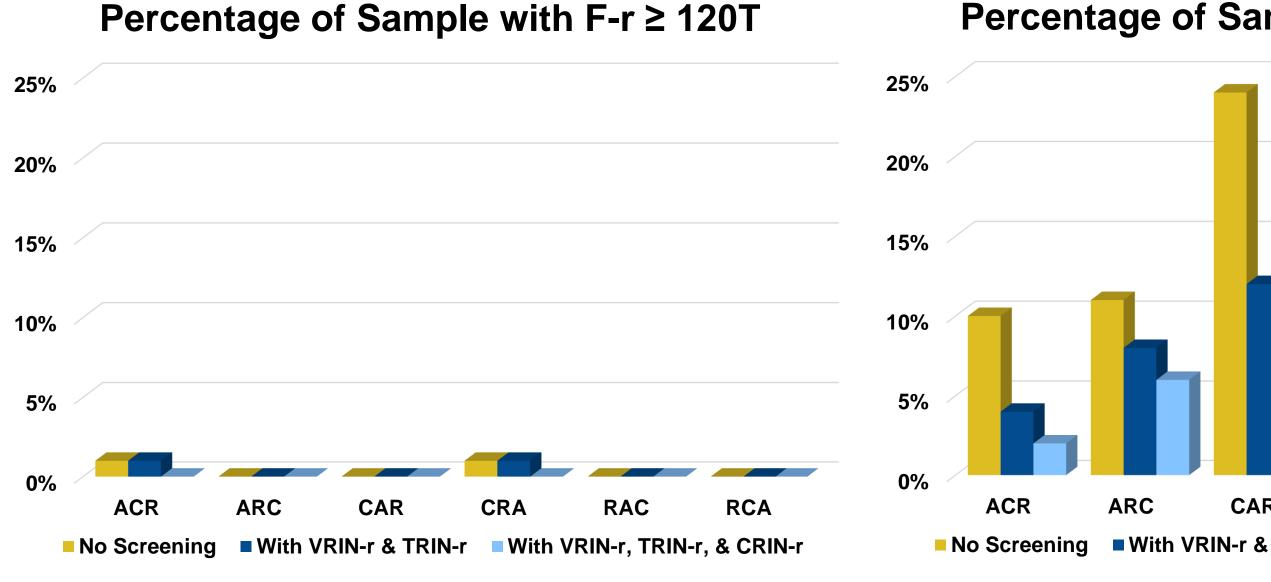
- We inserted computer-generated mixed responses into a forensic inpatient sample with no elevations on MMPI-2-RF Validity Scales.
  - Six datasets with 40% generated mixed responding were created.
  - Dividing participant items into 3 equal parts, we replaced 40% of items in each third of the test with 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. After adding CRIN to screen invalid protocols

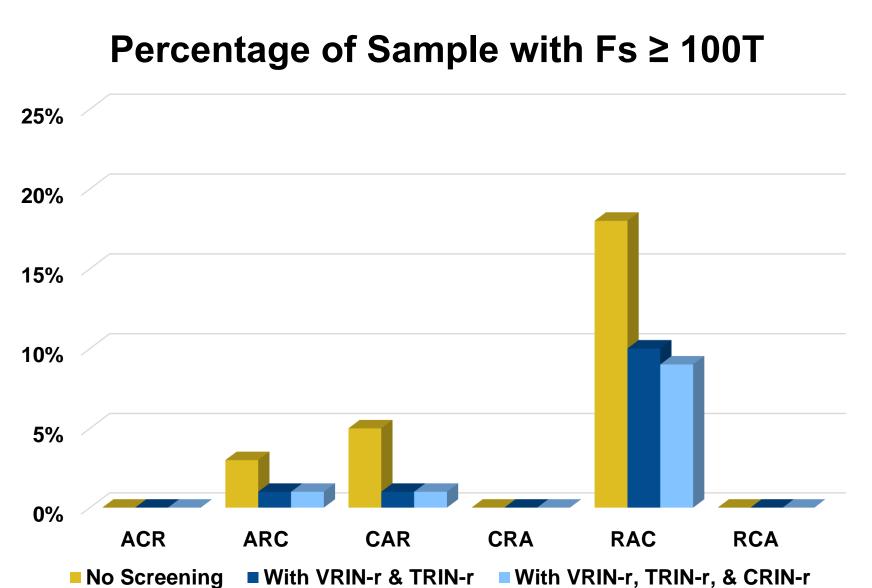
#### Table 1: MMPI-2-RF Content-Based Validity Scale Means for Original and 40% Mixed Response Insertion Conditions (N = 156)

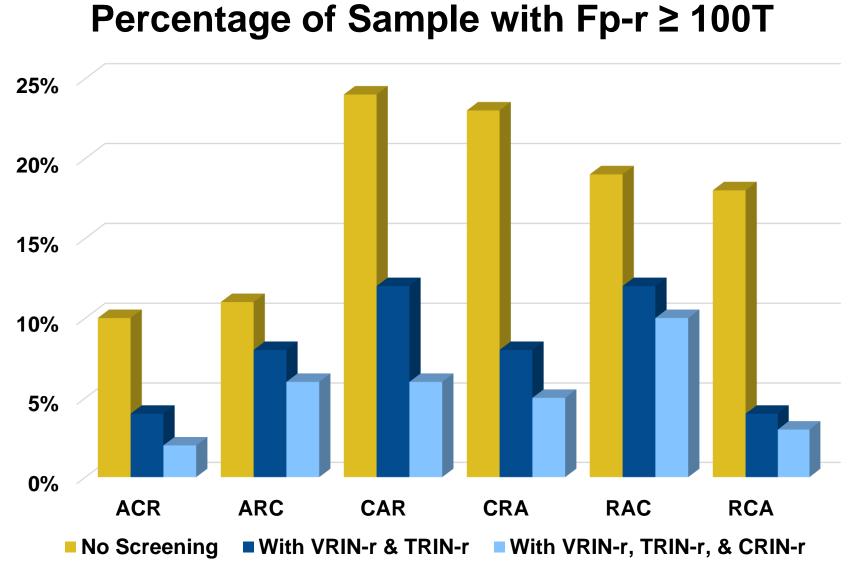
	Original	ACR	ARC	CAR	CRA	RAC	RCA
F-r	<b>55.71</b> (9.07)	<b>76.70</b> (10.41)	<b>72.14</b> (9.63)	<b>80.00</b> (10.53)	<b>84.65</b> (9.48)	<b>74.89</b> (11.20)	<b>83.35</b> (10.61)
Fp-r	<b>51.72</b> (9.07)	<b>78.78</b> (14.84)	<b>80.59</b> (14.84)	<b>88.10</b> (14.70)	<b>85.83</b> (13.78)	<b>84.36</b> (14.66)	<b>83.52</b> (15.55)
Fs	<b>52.82</b> (8.85)	<b>64.47</b> (11.23)	<b>76.53</b> (13.90)	<b>83.24</b> (13.78)	<b>74.57</b> (12.86)	<b>86.69</b> (14.97)	<b>62.22</b> (11.26)
FBS-r	<b>50.32</b> (8.89)	<b>62.88</b> (8.14)	<b>61.13</b> (8.09)	<b>56.24</b> (8.11)	<b>58.79</b> (8.14)	<b>58.26</b> (8.07)	<b>61.82</b> (7.68)
RBS	<b>51.85</b> (9.53)	<b>70.00</b> (10.41)	<b>67.57</b> (10.86)	<b>62.55</b> (9.90)	<b>63.87</b> (9.41)	<b>64.16</b> (10.01)	<b>66.89</b> (10.22)
L-r	<b>51.90</b> (7.06)	<b>60.31</b> (7.23)	<b>58.20</b> (7.16)	<b>59.81</b> (7.48)	<b>59.42</b> (7.98)	<b>58.43</b> (6.67)	<b>60.60</b> (8.58)
K-r	<b>50.13</b> (7.38)	<b>46.65</b> (6.25)	<b>47.02</b> (6.38)	<b>52.74</b> (5.76)	<b>52.48</b> (6.31)	<b>49.64</b> (6.15)	<b>48.87</b> (5.92)

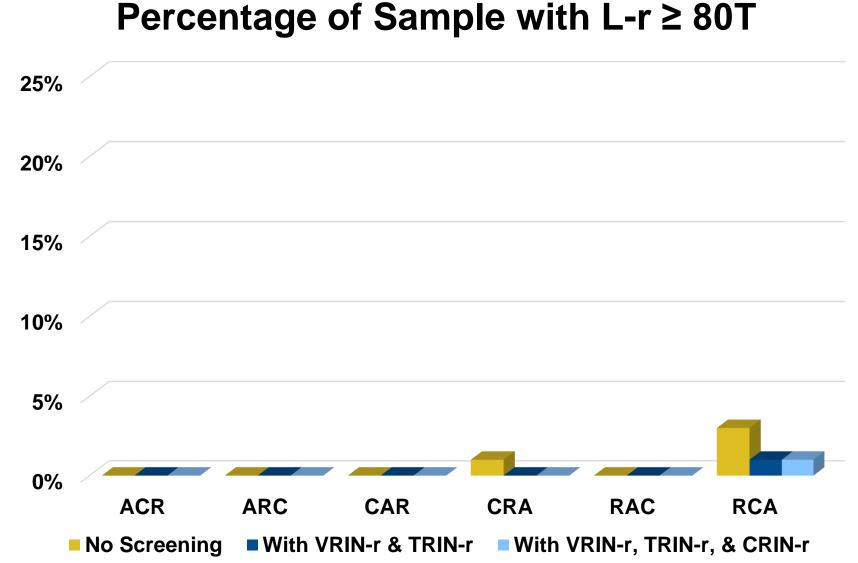
### Figure 1: MMPI-2-RF Content-Based Validity Scale Clinical Elevation Frequencies Due to 40% Mixed Response Insertion (N = 156)

Note. No elevations were observed for FBS-r, RBS, or K-r with 40% mixed response insertion. Therefore, figures are not displayed for those scales.









## Results & Discussion

- Mixed responses led to notable increases in contentbased 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 Fp-r to 4-12%.
  - Adding CRIN, the Fp-r '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.

### References

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<sup>6</sup>Whitney, K., Chille, T., Burchett, D., Ben-Porath, Y., & Glassmire, D. M. (2018). Sensitivity of an MMPI-2-RF Combined Response Inconsistency (CRIN) Scale to Mixed Responding. Paper to be presented at the Annual MMPI Symposium.

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