

# An Examination of the Impact of Mixed Variable & Fixed Non-Content-Based Invalid Responding on the MMPI-3 Substantive Scales

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## Introduction

- Non-content-based invalid responding can have a detrimental impact on the interpretability of MMPI substantive scales (e.g., unwarranted conclusions of severe psychopathology) (Dragon et al., 2012; Handel et al., 2010)
- Mixed inconsistent responding occurs when an examinee engages in a mixture of fixed and random responding
- No studies have examined the impact of mixed inconsistent responding on the MMPI-3 substantive scales

## Aims and Hypotheses

**How does mixed inconsistent responding affect MMPI-3 substantive scale means & elevations?**

- Hypothesis:** THD, RC1, RC2, RC6, RC8, NUC, EAT, SUI, HLP, BRf, & PSYC would be impacted due to a low % of items required to reach elevation & low item endorsement rates in the general population

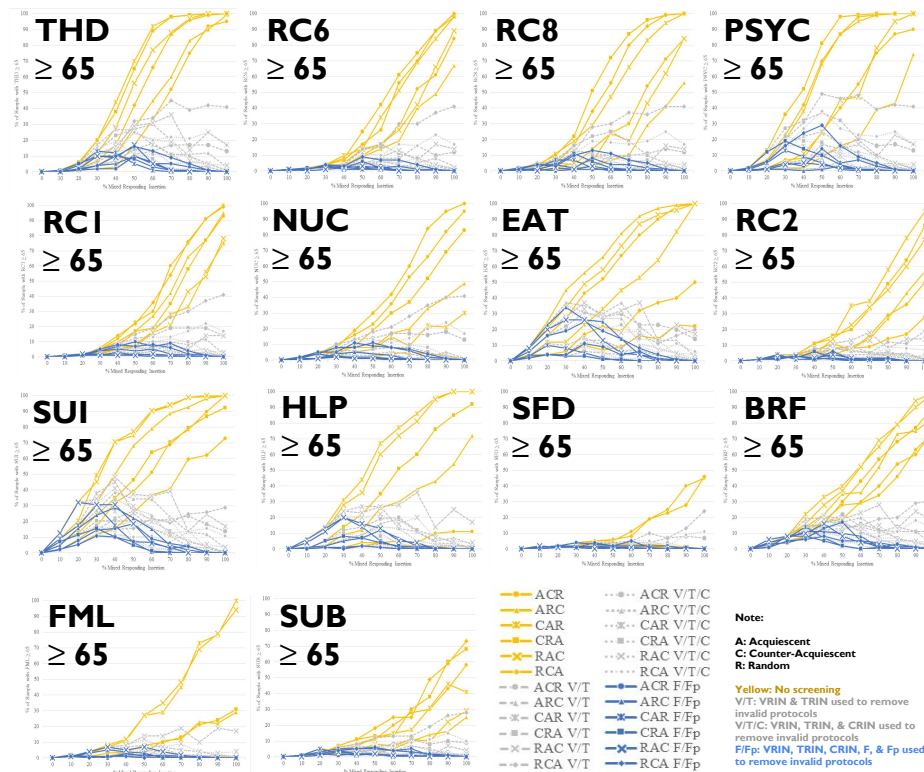
**Does screening for protocol invalidity reduce the likelihood of misinterpreting substantive scale elevations caused by mixed inconsistent responding?**

- Hypothesis:** Screening for protocol invalidity would reduce the risk of misinterpreting most substantive scales elevated due to mixed inconsistent responding as indicative of psychopathology

## Method

- Using a college student sample with no validity or substantive scale elevations ( $n = 166$ ), we created 61 datasets with increasing amounts of 6 conceptualizations of mixed inconsistent responding
- For instance, for ACR10: 10% of items in the first third of each person's results were replaced by acquiescent (or true) responses, 10% of middle items were replaced by counter-acquiescent (or false) responses, and 10% of the final third of items were replaced by randomly-selected true or false items
- We considered the item endorsement rarity, placement of items, True/False keying, and number of items required to reach 65T cut score to develop our hypotheses

## Impact of Mixed Inconsistent Responding on Selected Substantive Scale Elevation Rates



## Results

### Elevations Due to Mixed Inconsistent Responding:

- Each of the 11 hypothesized substantive scales was elevated due to mixed inconsistent responding
- Although not hypothesized, SFD, FML, and SUB also elevated
- The remaining substantive scales (not pictured) were not particularly impacted by mixed inconsistent responding

### After Screening for Protocol Validity:

- Elevations due to mixed inconsistent responding were reduced on most substantive scales after screening for invalid protocols
- EAT, SUI, and PSYC remained notably impacted by mixed inconsistent responding even after screening for invalidity

## Conclusion

- Most MMPI-3 substantive scales are not particularly susceptible to mixed inconsistent responding after screening out invalid protocols using VRIN, TRIN, CRIN, F, and Fp
- This study highlights the importance of screening for non-content-based invalid responding before interpreting MMPI-3 substantive scale elevations
- EAT, SUI, and PSYC remain susceptible to undetected mixed inconsistent responding even after screening for invalid protocols, so it is particularly important to interpret elevations on those scales in the context of extra-test information
- Future Direction:** Explore how often mixed inconsistent responding occurs in applied assessment settings

## Acknowledgements & Disclosures

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## References

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