

The Impact of Variable Responding on MMPI-3 Protocol Validity and the Role of a New CRIN Scale

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Introduction

- Variable (i.e., random) responding threatens the validity of omnibus tests often used in clinical and forensic evaluations.¹
- The Minnesota Multiphasic Personality Inventory-3 (MMPI-3) Variable Response Inconsistency (**VRIN**) Scale detects variable responding and the True Response Inconsistency (**TRIN**) Scale detects fixed responding.
- The new MMPI-3 Combined Response Inconsistency (**CRIN**) Scale provides an additional opportunity to detect variable responding not identified by VRIN alone.²
- Early research supports CRIN as incrementally useful to screen for *mixed* variable and fixed responding, but it needs to be studied in the context of pure *variable* responding.³⁻⁷

Aims & Hypotheses

We examined:

- Sensitivity of MMPI-3 CRIN, VRIN, and TRIN to variable responding.
- Susceptibility of remaining MMPI-3 scales to variable responding, before and after screening for invalidity.

We hypothesized:

- Scales comprised of many rare items would be most susceptible (e.g., Fp, THD, RC1, RC2, RC6, RC8, NUC, EAT, SUI, HLP, BRF, PSYC).
- CRIN would have incremental utility over VRIN and TRIN and reduce the likelihood of misinterpretations.

Method

Participants:

- College students with no MMPI-3 scale elevations (original $N = 1,902$; final stringently screened sample $n = 166$).

Procedure:

- We created datasets with increasing percentages of items replaced with True or False responses at random.
- We examined MMPI-3 scale scores before and after standard screening procedures.

Fig. 1: CRIN, VRIN, & TRIN Elevation Rates

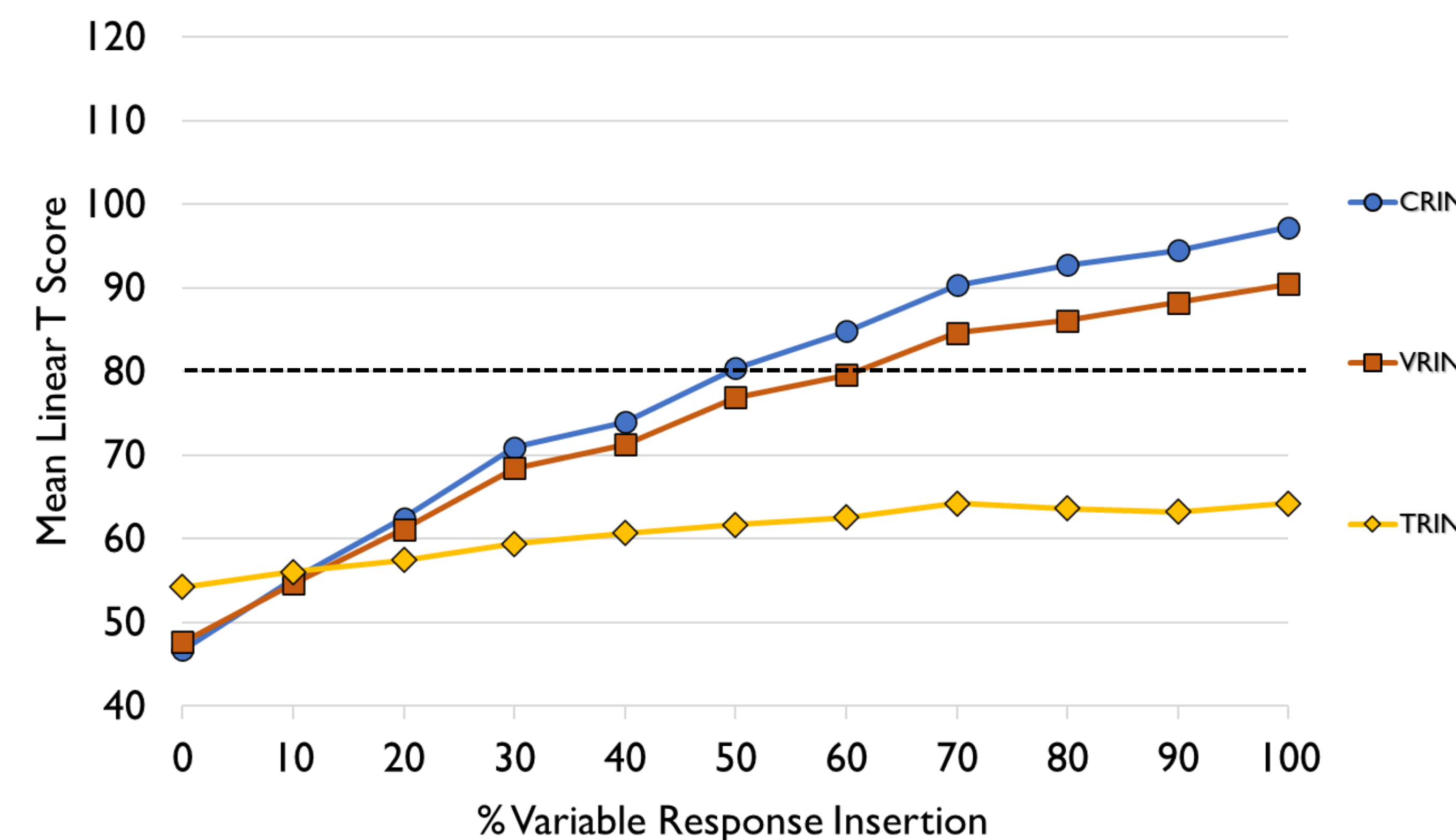


Fig. 2: Fp Elevation Rates Before & After Screening

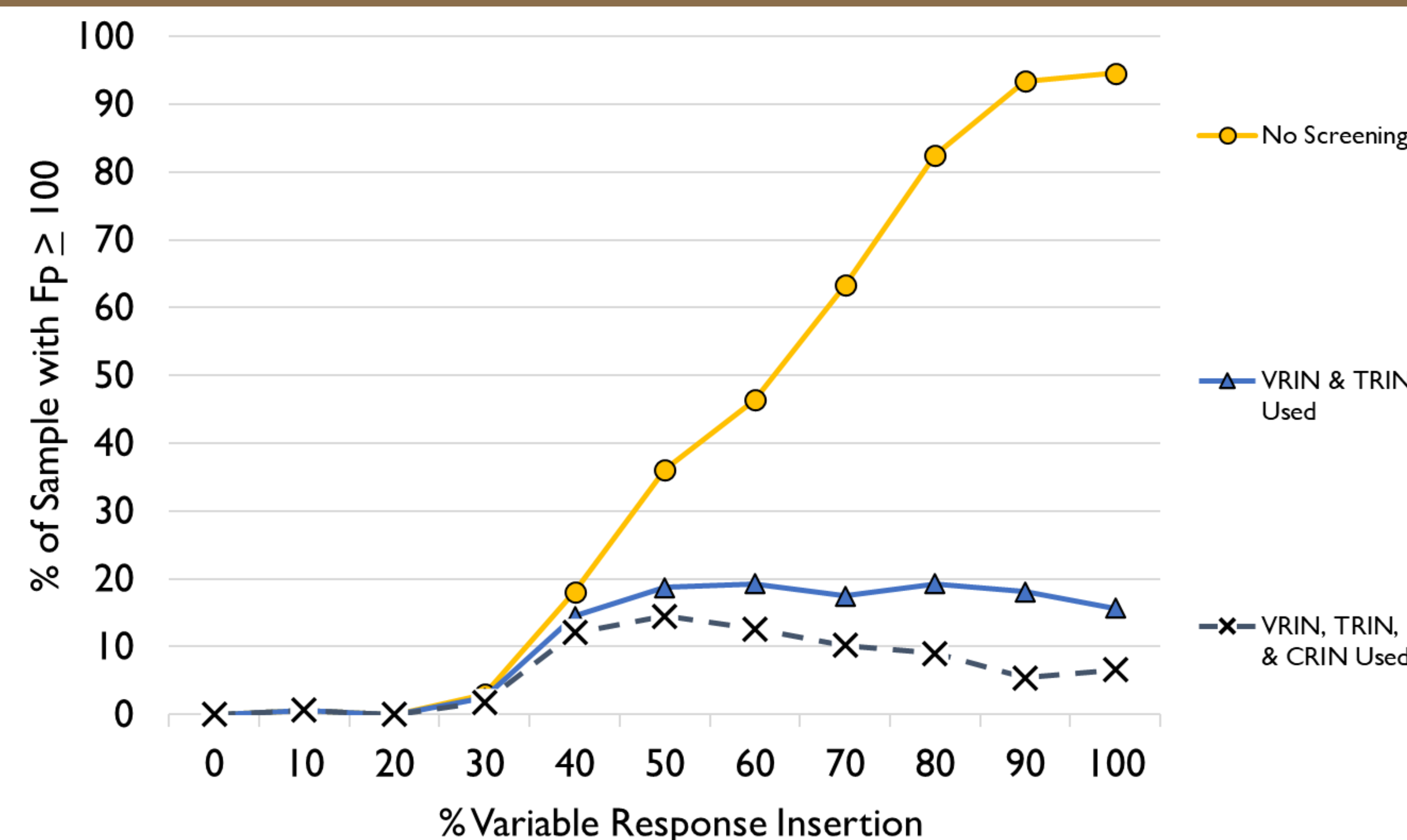
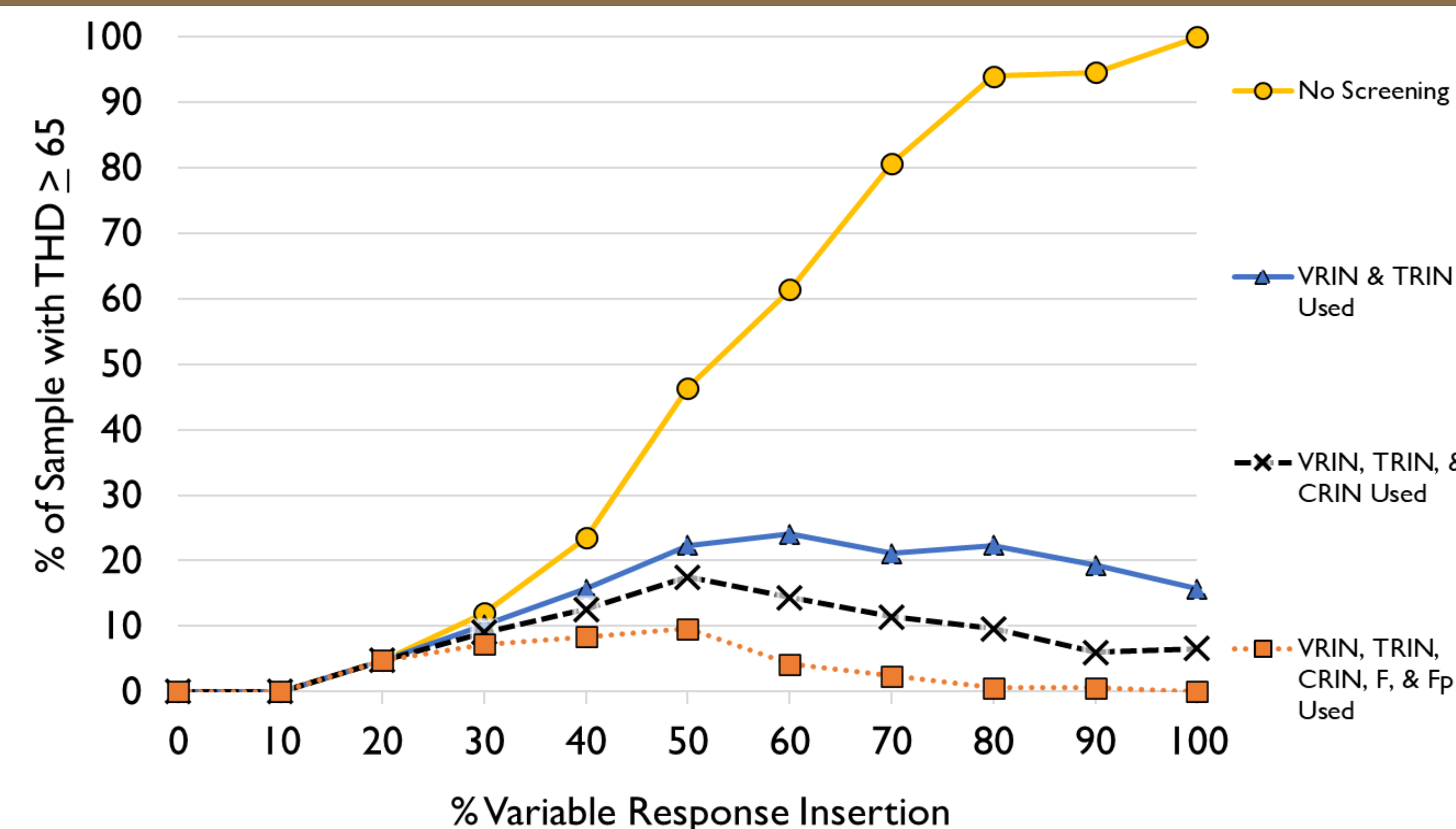


Fig. 3: THD Elevation Rates Before & After Screening



Results

- CRIN (and VRIN) means and elevation rates were most sensitive to variable responding.
- Some content-based validity scales (e.g., Fp, F, FBS, Fs) and substantive scales (e.g., THD, RC1, RC6, RC8, EAT, SUI, HLP, BRF, PSYC) were particularly susceptible to variable responding, but standard screening substantially reduced misinterpretations.

Conclusions

- As expected, CRIN and VRIN were more sensitive to variable responding than was TRIN.
- CRIN was the most sensitive tool and added incrementally to VRIN and TRIN.
- Unchecked variable responding is likely to lead to erroneous elevations, but CRIN helps reduce the risk of erroneous conclusions regarding content-based invalid responding and psychopathology.

References

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