3-2018

Examination of a Combined Response Inconsistency (CRIN) Scale for the MMPI-2-RF: Basic Properties in Normative and Forensic Inpatient Samples

Kendall Whitney  
*California State University, Monterey Bay*

Taylor Chille  
*California State University, Monterey Bay*

Danielle Burchett  
*California State University, Monterey Bay, dburchett@csumb.edu*

Yossef S. Ben-Porath  
*Kent State University*

David M. Glassmire  
*Patton State Hospital*

Follow this and additional works at: [https://digitalcommons.csumb.edu/psy_fac](https://digitalcommons.csumb.edu/psy_fac)

**Recommended Citation**  
Whitney, Kendall; Chille, Taylor; Burchett, Danielle; Ben-Porath, Yossef S.; and Glassmire, David M., "Examination of a Combined Response Inconsistency (CRIN) Scale for the MMPI-2-RF: Basic Properties in Normative and Forensic Inpatient Samples" (2018). *Psychology Faculty Publications and Presentations*. 5.  
[https://digitalcommons.csumb.edu/psy_fac/5](https://digitalcommons.csumb.edu/psy_fac/5)

This Poster is brought to you for free and open access by the Psychology at Digital Commons @ CSUMB. It has been accepted for inclusion in Psychology Faculty Publications and Presentations by an authorized administrator of Digital Commons @ CSUMB. For more information, please contact digitalcommons@csumb.edu.
Examination of a Combined Response Inconsistency (CRIN) Scale for the MMPI-2-RF: Basic Properties in Normative and Forensic Inpatient Samples

Kendall Whitney¹, Taylor Chille¹, Danielle Burchett, Ph.D.¹, Yossef S. Ben-Porath, Ph.D², & David M. Glassmire, Ph.D., ABPP³ ¹California State University, Monterey Bay, ²Kent State University, ³Patton State Hospital

Introduction

- The Minnesota Multiphasic Personality Inventory-2 Restructured Form (MMPI-2-RF) is a 338-item self-report personality and psychopathology inventory used commonly in forensic settings.
- Variable Response Inconsistency (VRIN-r) identifies random (i.e., variable) responding.
- True Response Inconsistency (TRIN-r) identifies fixed (i.e., acquiescent, counter-acquiescent) responding.
- Combined Response Inconsistency (CRIN), originally developed for the Minnesota Multiphasic Personality Inventory Adolescent Restructured Form (MMPI-A-RF) identifies mixed (i.e., partial random and fixed) responding.
- CRIN is calculated by summing VRIN-r, TRIN-r (True), and TRIN-r (False) raw points.
- Researchers have examined CRIN’s utility on the MMPI-A-RF but no previous studies have examined CRIN for use on the MMPI-2-RF.

Method

Participants

- We examined CRIN’s basic properties in the MMPI-2-RF normative sample and a forensic inpatient sample.

Participants

MMPI-2-RF Normative Sample

- 2,276 participants were sampled to represent the US population.

Psychiatric Inpatient Sample

- Archival MMPI-2/MMPI-2-RF data were culled from a maximum security forensic inpatient setting.
- Of the 1,081 individuals retained in the final sample, demographic characteristics include 72.7% male; mean age = 39.9 years (SD = 11.2); approximately 55% Caucasian, 24% African American, 17% Hispanic/Latino, 2% Asian American, and 2% from other ethnicities.

Method, continued

Procedures

MMPI-2-RF Normative Sample

- Of 2,276 participants, we retained 2,273 after excluding those with notable unscorable responding (CNS ≥ 18).
- We calculated CRIN and then converted CRIN’s raw points to Linear T Scores (Table 1).

Psychiatric Inpatient Sample

- Of 1,110 patients, we retained 1,081 after excluding those with notable unscorable responding (CNS ≥ 18).
- 84% of participants completed the 567-item MMPI-2. Data were rescored into MMPI-2-RF scores and CRIN raw and Linear T Scores were calculated.

Measures

- The MMPI-2-RF is a 338-item personality and psychopathology measure with 9 Validity Scales and 42 substantive scales.
- The current study utilizes two existing non-content-based Validity scales, VRIN-r and TRIN-r, as well as an experimental measure, CRIN.

Results

MMPI-2-RF Normative Sample

- As expected, few individuals exceeded 80T on VRIN-r (0.9%), TRIN-r (1.7%), or CRIN (0.8%).
- Given these rare rates of elevation, CRIN uniquely flagged only a very small number of protocols not already identified by VRIN-r and TRIN-r using 80T cut scores (0.2% of the total sample).

Psychiatric Inpatient Sample

- Elevations at 80T or above for VRIN-r (8%), TRIN-r (11%), and CRIN (14%) were more common in the forensic sample.
- 17% of protocols were flagged as non-content-based invalid based on VRIN-r or TRIN-r elevations.
- Of those, 65% were also flagged by CRIN.
- CRIN uniquely identified 28 (3% of total sample) invalid protocols not already identified by VRIN-r or TRIN-r at 80T (Fig. 1).

Limitations & Future Directions

- CRIN exhibited a modest unique elevation pattern compared to VRIN-r and TRIN-r.
- Future studies should utilize simulation designs.

Implications

- We had no data on the frequency of mixed responding.
- Future studies should utilize simulation designs.

References


3Pits, A. C. (2016). Psychometric functioning of the MMPI-A Restructured Form VRIN-r, TRIN-r, CRIN, and Cannot Say scales with varying degrees of randomness, acquiescence, counter-acquiescence, and omitted items. (Dissertation) Retrieved from Old Dominion University Digital Commons.

4http://digitallibrary.olemiss.edu/dspace/handle/1813/967


Acknowledgements

This research was made possible by support from a grant from the University of Minnesota Press, Test Division which supported data collection, and California State University, Monterey Bay Undergraduate Research Opportunity Center (UROC) which provided additional financial, logistical, and mentorship support. This research was approved by the CA Department of Mental Health Committee for the Protection of Human Subjects. The statements and opinions expressed are those of the authors and do not constitute the official views at the official policy of DHSS-Paton, The California Department of State Hospitals, or the State of California. Yossef Ben-Porath is a paid consultant to the MMPI publisher, the University of Minnesota Press, and distributor, Pearson. As co-author of the MMPI-2-RF he received royalties on sales of the instrument. In addition, the authors thank Harry Credel for his support of the research program at Patton State Hospital.