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Professor
Eastern Virginia Medical School
Department of Psychiatry and Behavioral Sciences
Disclosure

Dr. Richard Handel receives royalties on sales of MMPI-A-RF test materials in his role as a co-author of the test.

Factors in the Development of the MMPI-A-RF

• Need to reduce the high degree of MMPI-A scale intercorrelation
  • Reduce redundant influence of demoralization factor across scales
  • Reduce item overlap between scales
  • Reduce scale content multidimensionality
• Develop a test based on roughly 250 items
• Test length of MMPI-A viewed by some as a significant disadvantage
• Develop an adolescent self-report measure comparable to the MMPI-2-RF but adapted to include measures uniquely related to adolescent psychopathology
MMPI-A-RF Project

- Project formed in late-2007 by University of Minnesota Press, Kent State University, and EVMS
- MMPI-2-RF used as a template, e.g., RC, Higher-Order, and Specific Problems Scales
- Norms based on MMPI-A normative sample
- Clinical samples from several settings, with data sets used separately for scale development and validation
- Reduced length from 478 to 241 items

Salient differences between the MMPI-A and the MMPI-A-RF

<table>
<thead>
<tr>
<th>Variable</th>
<th>MMPI-A</th>
<th>MMPI-A-RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of Publication</td>
<td>1992</td>
<td>2016</td>
</tr>
<tr>
<td>Primary Influence</td>
<td>MMPI-2</td>
<td>MMPI-2-RF</td>
</tr>
<tr>
<td>Number of Items</td>
<td>478</td>
<td>241</td>
</tr>
<tr>
<td>Scale Structure</td>
<td>Extensive item overlap across scales</td>
<td>Non-overlapping items within hierarchical scale structure</td>
</tr>
<tr>
<td>Norms</td>
<td>Gender Specific</td>
<td>Non-gendered</td>
</tr>
<tr>
<td>T-score criterion for clinical elevation</td>
<td>$T \geq 65$</td>
<td>$T \geq 60$</td>
</tr>
</tbody>
</table>
11 studies including non-clinical samples (1995-2012)

<table>
<thead>
<tr>
<th>MMPI-A Scales</th>
<th>Validity</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>F</td>
</tr>
<tr>
<td>Mean</td>
<td>51.04</td>
<td>48.03</td>
</tr>
</tbody>
</table>

MMPI-A-RF Validity Scales

- VRIN-r (Variable Response Inconsistency-Revised)
  - Random responding
- TRIN-r (True Response Inconsistency-Revised)
  - Fixed responding
- CRIN (Combined Response Inconsistency)
  - Combination of fixed and random inconsistent responding
- F-r (Infrequent Responses-Revised)
  - Responses infrequent in normative and development samples
- L-r (Uncommon Virtues-Revised)
  - Rarely claimed moral attributes or activities
- K-r (Adjustment Validity-Revised)
  - Uncommonly high level of psychological adjustment
Cannot Say (CNS) Score Interpretation

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 10</td>
<td>Scores on some scales may be invalid.</td>
<td>• Reading or language limitations • Severe psychopathology • Obsessiveness • Lack of cooperation</td>
<td>Examine the content of unscorable items to detect possible themes. The impact is scale-dependent. For scales on which less than 90% of the items are scorable, the absence of elevation is uninterpretable.</td>
</tr>
<tr>
<td>1-9</td>
<td>Scores on some of the shorter scales may be invalid.</td>
<td>Selective non-responsiveness</td>
<td>Examine the content of unscorable items to detect possible themes. The impact is scale-dependent. For scales on which less than 90% of the items are scorable, the absence of elevation is uninterpretable.</td>
</tr>
<tr>
<td>0</td>
<td>None.</td>
<td>The test taker provided scorable responses to all 241 items.</td>
<td>The test taker was cooperative in terms of his or her willingness to respond to the test items.</td>
</tr>
</tbody>
</table>

VRIN-r (Variable Response Inconsistency-Revised)

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 75</td>
<td>The protocol is invalid because of excessive variable response inconsistency.</td>
<td>• Reading or language limitations • Cognitive impairment • Errors in recording responses • Intentional random responding</td>
<td>The protocol is uninterpretable.</td>
</tr>
<tr>
<td>65-74</td>
<td>There is some evidence of variable response inconsistency.</td>
<td>• Reading or language limitations • Cognitive impairment • Errors in recording responses • Carelessness</td>
<td>Scores on the Validity and Substantive Scales should be interpreted with some caution.</td>
</tr>
<tr>
<td>37-64</td>
<td>None.</td>
<td>• The test taker was able to comprehend and respond relevantly to the test items.</td>
<td>The protocol is interpretable.</td>
</tr>
</tbody>
</table>
### TRIN-r (True Response Inconsistency-Revised)

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 75T</td>
<td>The protocol is invalid because of excessive fixed, content-inconsistent True responding.</td>
<td>A non-cooperative test-taking approach</td>
<td>The protocol is uninterpretable.</td>
</tr>
<tr>
<td>65T-74T</td>
<td>There is some evidence of fixed, content-inconsistent True responding.</td>
<td>A non-cooperative test-taking approach</td>
<td>Scores on the Validity and Substantive Scales should be interpreted with some caution.</td>
</tr>
<tr>
<td>≥ 75F</td>
<td>The protocol is invalid because of excessive fixed, content-inconsistent False responding.</td>
<td>A non-cooperative test-taking approach</td>
<td>The protocol is uninterpretable.</td>
</tr>
<tr>
<td>65F-74F</td>
<td>There is some evidence of fixed, content-inconsistent False responding.</td>
<td>A non-cooperative test-taking approach</td>
<td>Scores on the Validity and Substantive Scales should be interpreted with some caution.</td>
</tr>
<tr>
<td>50-64</td>
<td>None</td>
<td></td>
<td>The protocol is interpretable.</td>
</tr>
</tbody>
</table>

### CRIN (Combined Response Inconsistency)

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
</table>
| ≥ 75    | The protocol is invalid because of excessive response inconsistency | • Reading or language limitations  
          • Cognitive impairment  
          • Errors in recording responses  
          • Intentional random responding  
          • An uncooperative test-taking approach | The protocol is uninterpretable |
| 65-74   | There is some evidence of response inconsistency | • Reading or language limitations  
          • Cognitive impairment  
          • Errors in recording responses  
          • Carelessness  
          • An uncooperative test-taking approach | Scores on the Validity and Substantive Scales should be interpreted with some caution |
| 37-64   | None                        | • The test taker was able to comprehend and respond relevantly to the test items. | The protocol is interpretable |
**F-r (Infrequent Responses-Revised)**

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 90</td>
<td>The protocol is invalid. Over-reporting is indicated by assertion of a considerably larger than average number of rare symptoms</td>
<td>Inconsistent responding Over-reporting</td>
<td>Inconsistent responding should be ruled out. This level of infrequent responding is very uncommon even in individuals with genuine, severe psychopathology</td>
</tr>
<tr>
<td>80-89</td>
<td>Possible over-reporting is indicated by assertion of a much larger-than-average number of symptoms</td>
<td>Inconsistent responding Severe psychopathology Severe emotional distress Over-reporting</td>
<td>Inconsistent responding should be ruled out. This level of infrequent responding may occur in individuals with genuine, severe psychopathology or emotional distress who report credible symptoms, but it can also reflect exaggeration.</td>
</tr>
<tr>
<td>70-79</td>
<td>Possible over-reporting is indicated.</td>
<td>Inconsistent responding Significant psychopathology Significant emotional distress Over-reporting</td>
<td>Inconsistent responding should be ruled out. This level of infrequent responding may occur in individuals with genuine, significant psychopathology. However, for individuals with no history or current corroborating evidence of psychopathology, it likely indicates over-reporting.</td>
</tr>
<tr>
<td>&lt; 70</td>
<td>There is no evidence of over-reporting.</td>
<td></td>
<td>The protocol is interpretable.</td>
</tr>
</tbody>
</table>

**L-r (Uncommon Virtues-Revised)**

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 80</td>
<td>The protocol is likely invalid. Under-reporting is indicated by the test taker.</td>
<td>Inconsistent responding Under-reporting</td>
<td>Inconsistent responding should be considered. If it is ruled out, note that this level of virtuous self-presentation is very uncommon even in individuals with a background stressing traditional values. Any absence of elevation on the Substantive Scales is uninterpretable.</td>
</tr>
<tr>
<td>70-79</td>
<td>Possible under-reporting is indicated by the test taker presenting himself or herself in a very positive light.</td>
<td>Inconsistent responding Under-reporting</td>
<td>If inconsistent responding is ruled out, note that this level of virtuous self-presentation is uncommon. Any absence of elevation on the Substantive Scales should be interpreted with caution.</td>
</tr>
<tr>
<td>65-69</td>
<td>Possible under-reporting is indicated by the test taker presenting himself or herself in a positive light.</td>
<td>Inconsistent responding Under-reporting</td>
<td>Any absence of elevation on the Substantive Scales should be interpreted with caution. Elevated scores on the Substantive Scales may underestimate the problems assessed by those scales.</td>
</tr>
<tr>
<td>&lt; 65</td>
<td>There is no evidence of under-reporting.</td>
<td></td>
<td>The protocol is interpretable.</td>
</tr>
</tbody>
</table>
### K-r (Adjustment Validity-Revised)

<table>
<thead>
<tr>
<th>T Score</th>
<th>Protocol Validity Concerns</th>
<th>Possible Reasons for Score</th>
<th>Interpretive Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 75</td>
<td>This protocol is likely invalid. Under-reporting is indicated by the test taker presenting himself or herself as remarkably well adjusted.</td>
<td>Inconsistent responding Under-reporting</td>
<td>Inconsistent responding should be considered. If it is ruled out, note that this level of psychological adjustment is rare among adolescents. The absence of elevation on the Substantive Scales is not interpretable.</td>
</tr>
<tr>
<td>66-74</td>
<td>Possible under-reporting is indicated by the test taker presenting himself or herself as very well adjusted.</td>
<td>Inconsistent responding Very good psychological adjustment Under-reporting</td>
<td>Inconsistent responding should be considered by examining the VRIN-r, TRIN-r, and CRIN scores. If it is ruled out, note that this level of psychological adjustment is relatively rare among adolescents.</td>
</tr>
<tr>
<td>60-65</td>
<td>Possible under-reporting is indicated by the test taker presenting himself or herself as well adjusted.</td>
<td>Inconsistent responding Good psychological adjustment Under-reporting</td>
<td>Inconsistent responding should be considered by examining the VRIN-r, TRIN-r, and CRIN scores. If it is ruled out, for individuals who are not well adjusted, any absence of elevation on the Substantive Scales should be interpreted with caution</td>
</tr>
<tr>
<td>&lt; 60</td>
<td>There is no evidence of under-reporting.</td>
<td></td>
<td>The protocol is interpretable.</td>
</tr>
</tbody>
</table>

### MMPI-A-RF

**HIGHER-ORDER (H-O) AND RESTRUCTURED CLINICAL (RC) SCALES**
Higher-Order (H-O) Scales

• EID (Emotional/Internalizing Dysfunction) - Problems associated with mood and affect
• THD (Thought Dysfunction) - Problems associated with disordered thinking
• BXD (Behavioral/Externalizing Dysfunction) - Problems associated with under-controlled behavior

Emotional/Internalizing Dysfunction (EID)

Test Responses
- T score \( \leq 40 \)
  - His or her responses indicate a better-than-average level of adjustment
- T score 60-79
  - His or her responses indicate significant emotional distress
- T score \( \geq 80 \)
  - His or her responses indicate considerable emotional distress that likely rises to a level perceived as a crisis

Empirical Correlates
A broad range of symptoms and difficulties associated with demoralization, low positive emotions, and negative emotional experiences (e.g., low morale, depression, anxiety, feeling overwhelmed, helpless, and pessimistic). Specific manifestation of emotional/internalizing dysfunction will be indicated by elevations on scales RCd, RC2, RC7, HLP, SFD, OCS, STW, ANX, ANP, BRF, SPF, NEGE-\( r \), and INTR-\( r \).

Diagnostic Considerations
- Evaluate for internalizing disorders
Thought Dysfunction (THD)

**Test Responses**
- T score 60-79
  - His or her responses indicate significant thought dysfunction
- T score ≥ 80
  - His or her responses indicate serious thought dysfunction

**Empirical Correlates**
A broad range of symptoms and difficulties associated with disordered thinking including paranoid delusions and auditory and visual hallucinations. Specific manifestations of thought dysfunction will be indicated by elevations on RC6, RC8, and PSYC-r.

**Diagnostic Considerations**
Evaluate for disorders associated with thought dysfunction, including possible substance-induced psychosis (If SUB > 60)

---

Behavioral/Externalizing Dysfunction (BXD)

**Test Response**
- T score ≤ 40
  - His or her responses indicate a higher-than-average level of behavioral constraint
- T score 60-79
  - His or her responses indicate significant externalizing and acting-out behaviors
- T score ≥ 80
  - His or her responses indicate considerable externalizing, acting-out behavior that very likely results in marked dysfunction and has gotten him or her into difficulties

**Empirical Correlates**
A broad range of behaviors and difficulties associated with under-controlled behavior (e.g., conduct-disordered and oppositional behaviors, alcohol or substance abuse, poor impulse control, school suspensions, running away). Specific manifestations of behavioral/externalizing dysfunction indicated by elevations on RC4, RC9, NSA, ASA, CNP, SUB, AGG, NPI, AGGR-r, and DISC-r.

**Diagnostic Considerations**
Evaluate for externalizing disorders including Conduct Disorder and Oppositional-Defiant Disorder
Restructured Clinical (RC) Scales

- **RCd (Demoralization)** - General unhappiness and dissatisfaction
- **RC1 (Somatic Complaints)** - Diffuse physical health complaints
- **RC2 (Low Positive Emotions)** - A distinctive, core vulnerability factor in depression
- **RC3 (Cynicism)** - Non-self-referential beliefs that others are bad and not to be trusted
- **RC4 (Antisocial Behavior)** - Rule breaking and irresponsible behavior
- **RC6 (Ideas of Persecution)** - Self-referential beliefs that others pose a threat
- **RC7 (Dysfunctional Negative Emotions)** - Maladaptive anxiety, anger, and irritability
- **RC8 (Aberrant Experiences)** - Unusual perceptions or thoughts associated with psychosis
- **RC9 (Hypomanic Activation)** - Over-activation, aggression, impulsivity, and grandiosity, uncontrolled behavior

---

**Alpha Coefficients**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Boys N=241</th>
<th>Girls N=178</th>
<th>Median SEM N=15,128</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCd (18 items)</td>
<td>.88</td>
<td>.87</td>
<td>4</td>
</tr>
<tr>
<td>RC1 (23 items)</td>
<td>.83</td>
<td>.84</td>
<td>5</td>
</tr>
<tr>
<td>RC2 (10 items)</td>
<td>.72</td>
<td>.66</td>
<td>7</td>
</tr>
<tr>
<td>RC3 (9 items)</td>
<td>.64</td>
<td>.61</td>
<td>6</td>
</tr>
<tr>
<td>RC4 (20 items)</td>
<td>.83</td>
<td>.85</td>
<td>5</td>
</tr>
<tr>
<td>RC6 (9 items)</td>
<td>.73</td>
<td>.71</td>
<td>6</td>
</tr>
<tr>
<td>RC7 (11 items)</td>
<td>.78</td>
<td>.63</td>
<td>5</td>
</tr>
<tr>
<td>RC8 (8 items)</td>
<td>.73</td>
<td>.69</td>
<td>6</td>
</tr>
<tr>
<td>RC9 (8 items)</td>
<td>.58</td>
<td>.58</td>
<td>7</td>
</tr>
</tbody>
</table>
**Demoralization (RCd)**

**Test Response**
- T score ≤ 40
  - Reports a higher-than-average level of life morale and life satisfaction
- T score 60–79
  - Reports feeling sad and dissatisfied with his or her current life circumstances
- T score ≥ 80
  - Reports feelings of depression, social isolation, low self-confidence, and helplessness

**Empirical Correlates**
- May experience suicidal ideation
-Feels life is a strain
-Feels sad
-Reports feeling “depressed”
-Feels anxious
-Has low self-esteem
-Has problems with attention and concentration
-Reports feeling ineffective in dealing with problems
-Complains of low energy and fatigue

**Diagnostic Considerations**
- Evaluate for depression-related disorder

**Treatment Considerations**
- Evaluate risk for self-harm (if suicide items are endorsed or HLP ≥ 60)

---

**MMPI-A-RF**

**SPECIFIC PROBLEMS (SP) SCALES**
Somatic/Cognitive Scales

- MLS (Malaise)
  - Overall sense of physical debilitation, poor health
- GIC (Gastrointestinal Complaints)
  - Nausea, recurring upset stomach, & poor appetite
- HPC (Head Pain Complaints)
  - Head and neck pain
- NUC (Neurological Complaints)
  - Dizziness, weakness, paralysis, loss of balance, etc.
- COG (Cognitive Complaints)
  - Memory problems, difficulties concentrating

Internalizing Scales

- HLP (Helplessness/Hopelessness)
  - Belief that goals cannot be reached or problems solved
- SFD (Self-Doubt)
  - Lack of self-confidence, feelings of uselessness
- NFC (Inefficacy)
  - Belief that one is indecisive and inefficacious
- OCS (Obsessions/Compulsions)
  - Varied obsessional and compulsive behaviors
- STW (Stress/Worry)
  - Preoccupation with disappointments, difficulty with time pressure
- AXY (Anxiety)
  - Pervasive anxiety, frights, frequent nightmares
- ANP (Anger Proneness)
  - Easily angered, impatient with others
- BRF (Behavior-Restricting Fears)
  - Fears that significantly inhibit normal behavior
- SPF (Specific Fears)
  - Multiple specific fears
Externalizing Scales

- NSA (Negative School Attitudes)
  - Negative attitudes and beliefs about school
- ASA (Antisocial Attitudes)
  - Various anti-social beliefs and attitudes
- CNP (Conduct Problems)
  - Difficulties at school and at home, stealing
- SUB (Substance Abuse)
  - Current and past misuse of alcohol and drugs
- AGG (Aggression)
  - Physically aggressive, violent behavior
- NPI (Negative Peer Influence)
  - Affiliation with negative peer group

Interpersonal Scales

- FML (Family Problems)
  - Conflictual family relationships
- IPP (Interpersonal Passivity)
  - Being unassertive and submissive
- SAV (Social Avoidance)
  - Avoiding or not enjoying social events
- SHY (Shyness)
  - Feeling uncomfortable and anxious around others
- DSF (Disaffiliativeness)
  - Disliking people and being around them
MMPI-A-RF
PSY-5 SCALES AND CRITICAL ITEMS

Personality Psychopathology Five (PSY-5) Scales

- AGGR-r (Aggressiveness-Revised)
  - Instrumental, goal-directed aggression
- PSYC-r (Psychoticism-Revised)
  - Disconnection from reality
- DISC-r (Disconstraint-Revised)
  - Under-controlled behavior
- NEGE-r (Negative Emotionality/Neuroticism-Revised)
  - Anxiety, insecurity, worry, and fear
- INTR-r (Introversion/Low Positive Emotionality-Revised)
  - Social disengagement and anhedonia
## Forbey and Ben-Porath
### MMPI-A-RF Critical Items

<table>
<thead>
<tr>
<th>Content Area</th>
<th># of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>2</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4</td>
</tr>
<tr>
<td>Cognitive Problems</td>
<td>2</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>7</td>
</tr>
<tr>
<td>Depression/Suicidal Ideation</td>
<td>7</td>
</tr>
<tr>
<td>Eating Problems</td>
<td>2</td>
</tr>
<tr>
<td>Family Problems</td>
<td>2</td>
</tr>
<tr>
<td>Hallucinatory Experiences</td>
<td>3</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>6</td>
</tr>
<tr>
<td>School Problems</td>
<td>4</td>
</tr>
<tr>
<td>Self-Denigration</td>
<td>2</td>
</tr>
<tr>
<td>Somatic Complaints</td>
<td>6</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>5</td>
</tr>
<tr>
<td>Unusual Thinking</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Items</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>
# MMPI-A-RF Interpretation

## Topic

### I. Protocol Validity

- a. Content Non-Responsiveness
  - CNS, VRIN-r, TRIN-r, CRIN

- b. Over-Reporting
  - F-r

- c. Under-Reporting
  - L-r, K-r

### II. Substantive Scale Interpretation

- a. Somatic/Cognitive Dysfunction
  - RC1, MLS, GIC, HPC, NUC, COG

- b. Emotional Dysfunction
  - 1. EID
  - 2. RC4, HLP, SFD, NFC
  - 3. RC2, INTR-r
  - 4. RC7, STW, AXY, ANP, BRF, SPF, OCS, NEGE-r

- c. Thought Dysfunction
  - 1. THD
  - 2. RC6
  - 3. RC8
  - 4. PSYC-r

- d. Behavioral Dysfunction
  - 1. BXD
  - 2. RC4, NSA, ASA, CNP, SUB, NPI
  - 3. RC9, AGG
  - 4. AGGR-r, DISC-r

- e. Interpersonal Dysfunction
  - 1. FML
  - 2. RC3
  - 3. IPP
  - 4. SAV
  - 5. SHY
  - 6. DSF

- f. Diagnostic Considerations
  - Most Substantive Scales

- g. Treatment Considerations
  - All Substantive Scales

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# MMPI-A-RF Score Report

## Clinical Case Example:

**Stephen – Psychiatric Outpatient**

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MMPI-A-RF Validity Scales

MMPI-A-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales
MMPI-A-RF Somatic/Cognitive and Internalizing Scales

MMPI-A-RF Externalizing and Interpersonal Scales
MMPI-A-RF Interpretive Report

Clinical Case Example:
Stephen – Psychiatric Outpatient
Interpretive Report

MMPI-A-RF™
Minnesota Multiphasic Personality Inventory-Adolescent-Restructured Form™
Robert P. Archer, PhD, Richard W. Handel, PhD, Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

Name: Stephen
ID Number: 622932
Age: 15
Gender: Male
Years of Education: Not reported
Date Assessed: 10/01/2015
MMPI-A-RF Validity Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Raw Score</th>
<th>T Score</th>
<th>Response %</th>
<th>Cannot Say (Raw)</th>
<th>Percent True (of items answered)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRIN-r</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td>49%</td>
</tr>
<tr>
<td>TRIN-r</td>
<td>5</td>
<td></td>
<td></td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>CRIN</td>
<td>2</td>
<td></td>
<td></td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>F-r</td>
<td>4</td>
<td>47</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L-r</td>
<td>3</td>
<td></td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>K-r</td>
<td>0</td>
<td></td>
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<td>100</td>
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</tbody>
</table>

Comparison Group Data: Psychiatric Outpatients, National (Boys), N = 6851

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean T Score</th>
<th>Standard Dev</th>
<th>Percent scoring at or below adolescent</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRIN-r</td>
<td>47</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>TRIN-r</td>
<td>51 F</td>
<td>8</td>
<td>47</td>
</tr>
<tr>
<td>CRIN</td>
<td>47</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>F-r</td>
<td>50</td>
<td>11</td>
<td>80</td>
</tr>
<tr>
<td>L-r</td>
<td>53</td>
<td>11</td>
<td>72</td>
</tr>
<tr>
<td>K-r</td>
<td>52</td>
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</table>

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-A-RF T scores are non-gendered.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VRIN-r</td>
<td>Variable Response Inconsistency</td>
</tr>
<tr>
<td>TRIN-r</td>
<td>True Response Inconsistency</td>
</tr>
<tr>
<td>CRIN</td>
<td>Combined Response Inconsistency</td>
</tr>
<tr>
<td>F-r</td>
<td>Infrequent Responses</td>
</tr>
<tr>
<td>L-r</td>
<td>Uncommon Virtues</td>
</tr>
<tr>
<td>K-r</td>
<td>Adjustment Validity</td>
</tr>
</tbody>
</table>
MMPI-A-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales

Comparison Group Data: Psychiatric Outpatients, National (Boys), N = 6851
Mean T Score (± 1 SD): 50 52 52 52 49 51 51 54 53 46 49 47
Standard Dev (± 1 SD): 13 12 12 13 11 12 11 12 12 10 11 10
Percent scoring at or below adolescent: 98 69 25 93 74 97 69 35 66 94 78 62

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-A-RF T scores are non-gendered.
MMPI-A-RF Somatic/Cognitive and Internalizing Scales

Raw Score: 6 1 1 1 3 5 4 4 2 6 2 3 0 2
T Score: 73 58 51 48 61 60 62 74 53 64 59 52 43 50
Response %: 100 100 100 100 100 100 100 100 100 100 100 100 100 100

Comparison Group Data: Psychiatric Outpatients, National (Boys), N = 6851
Mean T Score (\(\pm\) SD): 52 50 49 50 55 51 50 50 48 50 50 50 48 46
Standard Dev (\(\pm\) SD): 12 11 10 11 13 12 12 11 10 11 11 11 9 8
Percent scoring at or below adolescent: 96 86 77 60 81 85 87 100 85 91 90 72 70 88

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-A-RF T scores are non-gendered.
MMPI-A-RF Externalizing and Interpersonal Scales

Raw Score: 3 1 0 0 2 1 3 2 7 8 2
T Score: 55 39 38 42 54 40 45 59 82 69 58
Response %: 100 100 100 100 100 100 100 100 100 100 100

Comparison Group Data: Psychiatric Outpatients, National (Boys), N = 6851
Mean T Score (± 1 SD): 56 53 58 49 50 51 51 49 52 46 51
Standard Dev (± 1 SD): 14 12 13 10 11 12 11 12 10 11
Percent scoring at or below adolescent: 63 15 14 65 79 25 39 90 100 98 86

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-A-RF T scores are non-gendered.
MMPI-A-RF Personality Psychopathology Five (PSY-5) Scales

Raw Score:
- AGGR-r: 4
- PSYC-r: 3
- DISC-r: 3
- NEGE-r: 12
- INTR-r: 12

T Score:
- AGGR-r: 44
- PSYC-r: 57
- DISC-r: 42
- NEGE-r: 77
- INTR-r: 81

Response %:
- AGGR-r: 100
- PSYC-r: 100
- DISC-r: 100
- NEGE-r: 100
- INTR-r: 100

Comparison Group Data:
- Psychiatric Outpatients, National (Boys), N = 6851
- Mean T Score (± 1 SD): 51 ± 13
- Standard Deviation of T Scores: 52 ± 12
- Percent scoring at or below adolescent:
  - AGGR-r: 37
  - PSYC-r: 79
  - DISC-r: 19
  - NEGE-r: 99
  - INTR-r: 97

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-A-RF T scores are non-gendered.
# MMPI-A-RF T Scores (By Domain)

## Protocol Validity

<table>
<thead>
<tr>
<th>Content Non-Responsiveness</th>
<th>1</th>
<th>47</th>
<th>50</th>
<th>43</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS</td>
<td>VRIN-r</td>
<td>TRIN-r</td>
<td>CRIN</td>
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<tr>
<td>Over-Reporting</td>
<td>55</td>
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<td></td>
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<tr>
<td>F-r</td>
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</tr>
<tr>
<td>Under-Reporting</td>
<td>56</td>
<td>31</td>
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<tr>
<td>L-r</td>
<td>K-r</td>
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</tr>
</tbody>
</table>

## Substantive Scales

### Somatic/Cognitive Dysfunction
<table>
<thead>
<tr>
<th>53</th>
<th>73</th>
<th>58</th>
<th>51</th>
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<th>61</th>
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<tbody>
<tr>
<td>RC1</td>
<td>MLS</td>
<td>GIC</td>
<td>HPC</td>
<td>NUC</td>
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### Emotional Dysfunction
<table>
<thead>
<tr>
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<tr>
<td>RCd</td>
<td>HLP</td>
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<table>
<thead>
<tr>
<th>75</th>
<th>81</th>
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<tbody>
<tr>
<td>RC2</td>
<td>INTR-r</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>63</th>
<th>53</th>
<th>64</th>
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<td>STW</td>
<td>AXY</td>
<td>ANP</td>
<td>BRF</td>
<td>SPF</td>
<td>NEGE-r</td>
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### Thought Dysfunction
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>RC6</td>
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<table>
<thead>
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<th>52</th>
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<td>RC8</td>
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<table>
<thead>
<tr>
<th>57</th>
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<tr>
<td>PSYC-r</td>
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### Behavioral Dysfunction
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<tr>
<th>42</th>
<th>48</th>
<th>55</th>
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<tr>
<td>RC4</td>
<td>NSA</td>
<td>ASA</td>
<td>CNP</td>
<td>SUB</td>
<td>NPI</td>
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</table>

<table>
<thead>
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<th>45</th>
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<th>44</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC9</td>
<td>AGG</td>
<td>AGGR-r</td>
<td>DISC-r</td>
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</table>

### Interpersonal Functioning
<table>
<thead>
<tr>
<th>45</th>
<th>52</th>
<th>59</th>
<th>82</th>
<th>69</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>FML</td>
<td>RC3</td>
<td>IPP</td>
<td>SAV</td>
<td>SHY</td>
<td>DSF</td>
</tr>
</tbody>
</table>

*The adolescent provided scorable responses to less than 90% of the items scored on this scale. See the relevant profile page for the specific percentage. Scale scores shown in bold font are interpreted in the report.*

*Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-A-RF interpretation in Chapter 7 of the MMPI-A-RF Administration, Scoring, Interpretation, and Technical Manual, which provides details in the text and an outline in Table 7-1.*
This interpretive report is intended for use by a professional qualified to interpret the MMPI-A-RF. The information it contains should be considered in the context of the adolescent's background, the circumstances of the assessment, and other available information.

SYNOPSIS

This is a valid MMPI-A-RF protocol. Scores on the substantive scales indicate somatic and cognitive complaints, and emotional and interpersonal dysfunction. Somatic complaints relate to malaise. Cognitive complaints include difficulties in memory and concentration. Emotional-internalizing findings include suicidal ideation, demoralization, depression, generalized negative emotions, helplessness and hopelessness, self-doubt, feelings of inefficacy, and stress and worry. Interpersonal difficulties include social avoidance and social anxiety.

PROTOCOL VALIDITY

Content Non-Responsiveness

Unscorable Responses
The adolescent answered less than 90% of the items on the following scale. The resulting score may therefore be artificially lowered. In particular, the absence of elevation on this scale is not interpretable. A list of all items for which the adolescent provided unscorable responses appears under the heading "Item-Level Information."

Ideas of Persecution (RC6): 89%

Inconsistent Responding
The adolescent responded to the items in a consistent manner, indicating that he responded relevantly.

Over-Reporting
There are no indications of over-reporting in this protocol.

Under-Reporting
There are no indications of under-reporting in this protocol.
SUBSTANTIVE SCALE INTERPRETATION

Clinical symptoms, personality characteristics, and behavioral tendencies of the adolescent are described in this section and organized according to an empirically guided framework. Statements containing the word "reports" are based on the item content of MMPI-A-RF scales, whereas statements that include the word "likely" are based on empirical correlates of scale scores, as reported in Appendix G of the MMPI-A-RF manual. Specific sources for each statement can be accessed with the annotation features of this report.

Somatic/Cognitive Dysfunction
The adolescent reports experiencing poor health, weakness, and/or fatigue. He likely presents with multiple somatic complaints and complains of sleeplessness and low energy and fatigue.

He reports a diffuse pattern of cognitive complaints and indeed likely experiences attention problems, difficulties with concentration, and slow speech.

Emotional Dysfunction
The adolescent has responded in the keyed direction to one or more of the MMPI-A-RF items related to suicidal ideation or preoccupation with death. Please refer to the Critical Items section of the report. In addition, he received elevated scores on one or more scales that are correlated with suicidal ideation and with suicide attempts or gestures.

His responses indicate considerable and pervasive emotional distress that is likely to be perceived as a crisis. More specifically, he reports a lack of positive emotional experiences and being socially disengaged. He likely experiences anhedonia and psychomotor retardation. He is likely difficult to motivate and self-punishing.

The adolescent reports feeling sad and being dissatisfied with his current life circumstances. He indeed likely feels sad and/or depressed and that life is a strain and has low self-esteem. He also reports being indecisive and ineffective in coping with difficulties and likely procrastinates. In addition, he reports self-doubt, feelings of uselessness, and poor self-esteem. He likely feels inferior and is self-defeating, self-degrading, and passive. He also reports feeling hopeless and helpless and indeed likely feels hopeless and like a failure and believes he gets a raw deal from life and cannot be helped. He likely gives up easily. He may engage in self-mutilation.

He reports an above-average level of negative emotional experiences including remorse and apprehensiveness. He likely experiences anxiety, nightmares, and insecurity. He also reports an above-average level of stress and worry.

Thought Dysfunction
There are no indications of disordered thinking in this protocol.
Behavioral Dysfunction
There are no indications of maladaptive externalizing behavior in this protocol. The adolescent reports a below-average number of conduct problems.  

Interpersonal Functioning Scales
The adolescent reports substantial social avoidance and withdrawal and very likely has few or no friends. He very likely is introverted and socially withdrawn and isolated. He also very likely is socially awkward, may be bullied by peers, and may be uncomfortable with the opposite sex. He also reports being shy, easily embarrassed, and uncomfortable around others. He indeed likely is shy.

DIAGNOSTIC CONSIDERATIONS

This section provides recommendations for psychodiagnostic assessment based on the adolescent's MMPI-A-RF results. It is recommended that he be evaluated for the following:

Emotional-Internalizing Disorders
- Somatic Symptom Disorder and related disorders, if physical origins for malaise have been ruled out
- Internalizing disorders
- Depression-related disorders and other conditions characterized by anhedonia
- Anxiety-related disorders
- Stress-related disorders

Behavioral-Externalizing Disorders
- Attention Deficit/Hyperactivity Disorder (ADHD) and related neurodevelopmental disorders

Interpersonal Disorders
- Disorders associated with social avoidance
- Social Anxiety Disorder

TREATMENT CONSIDERATIONS

This section provides inferential treatment-related recommendations based on the adolescent’s MMPI-A-RF scores.

Areas for Further Evaluation
- Evaluate risk for self-harm.
- May require inpatient treatment due to significant depression.
- Evaluate need for antidepressant medication.
- Explore origin of cognitive complaints. This may require a neuropsychological evaluation.
Psychotherapy Process Issues
- Malaise may impede his willingness or ability to engage in treatment.  
- Emotional difficulties may motivate him for treatment.  
- Significant lack of positive emotions and social isolation may interfere with engagement in therapy.

Possible Targets for Treatment
- Pronounced anhedonia
- Psychological distress as an initial target
- Passivity and indecisiveness
- Low self-esteem and lack of confidence
- Feelings of hopelessness and helplessness
- Dysfunctional negative emotions
- Stress management
- Social avoidance
- Social anxiety

ITEM-LEVEL INFORMATION

Unscorable Responses
Following is a list of items to which the adolescent did not provide scorable responses. Unanswered or double answered (both True and False) items are unscorable. The scales on which the items appear are in parentheses following the item content.

26. Item Content Omitted. (TRIN-r, CRIN, THD, RC6)

Critical Responses
Six MMPI-A-RF scales--Helplessness/Hopelessness (HLP), Anxiety (AXY), Ideas of Persecution (RC6), Aberrant Experiences (RC8), Substance Abuse (SUB), and Aggression (AGG)--have been designated by the test authors as having critical item content that may require immediate attention and follow-up. Items answered by the adolescent in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 60 or higher. The percentage of the MMPI-A-RF normative sample (NS) and of the Psychiatric Outpatients, National (Boys) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Helplessness/Hopelessness (HLP, T Score = 60)
56. Item Content Omitted. (False; NS 31.6%, CG 28.1%)
60. Item Content Omitted. (True; NS 39.9%, CG 30.2%)
169. Item Content Omitted. (False; NS 17.1%, CG 19.0%)
228. Item Content Omitted. (True; NS 35.6%, CG 33.3%)
239. Item Content Omitted. (True; NS 40.9%, CG 49.1%)
Critical Items (Forbey & Ben-Porath)

The MMPI-A-RF contains a number of items whose content may indicate the presence of psychological problems when endorsed in the deviant direction. These "critical items" are adopted from the ones designated by Forbey and Ben-Porath for the MMPI-A (for details, see Forbey, J.D., & Ben-Porath, Y.S. [1998] A critical item set for the MMPI-A. Minneapolis, MN: University of Minnesota Press). Responses to critical items may provide an additional source of hypotheses about the adolescent; however, they should be used with caution because single item responses are unreliable. The percentage of the MMPI-A-RF normative sample (NS) and of the Psychiatric Outpatients, National (Boys) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Anxiety

170. Item Content Omitted. (True; NS 12.4%, CG 23.3%)

Cognitive Problems

126. Item Content Omitted. (True; NS 17.0%, CG 20.2%)

Conduct Problems

111. Item Content Omitted. (True; NS 24.6%, CG 25.5%)

Depression/Suicidal Ideation

46. Item Content Omitted. (True; NS 30.3%, CG 23.9%)

69. Item Content Omitted. (True; NS 20.1%, CG 26.0%)

Hallucinatory Experiences

108. Item Content Omitted. (True; NS 12.0%, CG 12.9%)

School Problems

40. Item Content Omitted. (True; NS 22.3%, CG 36.7%)
ENDNOTES

This section lists for each statement in the report the MMPI-A-RF score(s) that triggered it. In addition, each statement is identified as a Test Response (if based on item content), a Correlate (if based on empirical correlates), or an Inference (if based on the report authors' judgment). This information can also be accessed on-screen by placing the cursor on a given statement. Validity data supporting the correlate-based statements may be found in the MMPI-A-RF Administration, Scoring, Interpretation, and Technical Manual.

1 Test Response: MLS=73
2 Correlate: MLS=73; COG=61
3 Correlate: MLS=73; STW=64
4 Correlate: RC2=75; MLS=73; INTR-r=81
5 Test Response: COG=61
6 Correlate: COG=61
7 Correlate: RCd=74; RC7=63; MLS=73; COG=61; STW=64; NEGE-r=77
8 Correlate: RC7=63; HLP=60; SFD=62; NEGE-r=77
9 Correlate: SFD=62
10 Correlate: EID=80
11 Test Response: RC2=75; INTR-r=81
12 Correlate: RC2=75; INTR-r=81
13 Correlate: RC2=75
14 Test Response: RCd=74
15 Correlate: RCd=74; RC2=75; HLP=60; SFD=62; NEGE-r=77; INTR-r=81
16 Correlate: RCd=74
17 Correlate: RCd=74; RC2=75; RC7=63; HLP=60; NEGE-r=77; INTR-r=81
18 Test Response: NFC=74
19 Correlate: NFC=74
20 Test Response: SFD=62
21 Correlate: SFD=62; SHY=69
22 Correlate: RC2=75; SFD=62
23 Correlate: SFD=62; NFC=74
24 Test Response: HLP=60
25 Correlate: RC2=75; HLP=60
26 Correlate: HLP=60
27 Correlate: HLP=60; INTR-r=81
28 Test Response: RC7=63; NEGE-r=77
29 Correlate: RC7=63; HLP=60; NFC=74; STW=64; NEGE-r=77
30 Correlate: RC7=63
31 Test Response: STW=64
32 Test Response: CNP=38
33 Test Response: SAV=82
34 Correlate: SAV=82; SHY=69
35 Correlate: RC2=75; SFD=62; SAV=82; SHY=69; INTR-r=81
36 Correlate: RC2=75; SAV=82; SHY=69; INTR-r=81
37 Correlate: SAV=82
38 Test Response: SHY=69
39 Correlate: SHY=69
40 Inference: MLS=73
41 Inference: EID=80
42 Inference: RCd=74; RC2=75; HLP=60; SFD=62; NEGE-r=77; INTR-r=81
43 Inference: RC2=75
44 Inference: RC7=63; NEGE-r=77; INTR-r=81
45 Inference: STW=64
46 Inference: COG=61
47 Inference: SAV=82
48 Inference: SHY=69
49 Inference: RC7=63; HLP=60; SFD=62
50 Inference: EID=80; RCd=74; RC7=63; NEGE-r=77
51 Inference: RCd=74
52 Inference: NFC=74
53 Inference: SFD=62
54 Inference: HLP=60
55 Inference: RC7=63; NEGE-r=77

End of Report

This and previous pages of this report contain trade secrets and are not to be released in response to requests under HIPAA (or any other data disclosure law that exempts trade secret information from release). Further, release in response to litigation discovery demands should be made only in accordance with your profession's ethical guidelines and under an appropriate protective order.
MMPI-A-RF
DOCUMENTATION AND
STANDARD PROCEDURES

MMPI-A-RF Documentation

• Manual for Administration, Scoring, and Interpretation
• User’s Guide for Reports
QUESTIONS?

Dr. Richard W. Handel:
handelrw@EVMS.edu