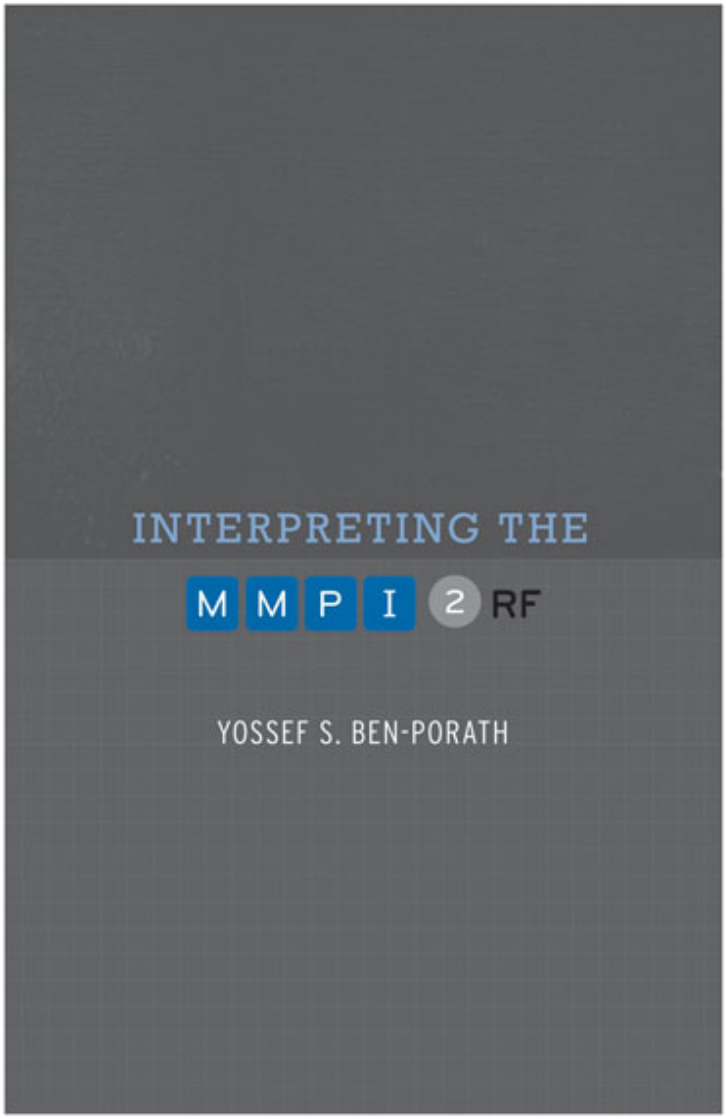
TRAINING SLIDES FOR:

INTERPRETING THE MMPI-2-RF



CHAPTER 1: BACKGROUND

MMPI Background

- Developed in 1930s by Hathaway and McKinley
- Intended to function as a differential diagnostic instrument
- Clinical scales designed to assess common "Kraepelinian" syndromes
  - Hypochondriasis, Depression, Hysteria, Psychopathic Deviate, Paranoia, Psychasthenia, Schizophrenia, Hypomania
- Published in 1943

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MMPI Background

- Theoretical Foundations:
  1. Kraepelinian descriptive nosology
  2. Items as stimuli for behavioral responses, the aggregates of which may have certain empirical correlates, including diagnostic group membership
  3. Rejection of content-based test interpretation as overly susceptible to misleading responding
  4. #3 notwithstanding, test takers do attend to item content and may intentionally or unintentionally respond in a misleading manner

MMPI Background

- Scale Development:
  - Follows methodology used by Strong to develop his Vocational Interest Blank
  - Responses (to an assembled pool of items) of eight criterion groups diagnosed with the targeted disorders (n=20-50) contrasted with those of a "normal" group
  - Result: Eight original Clinical Scales
    - Later augmented by *Masculinity/Femininity* and *Social Introversion scales*

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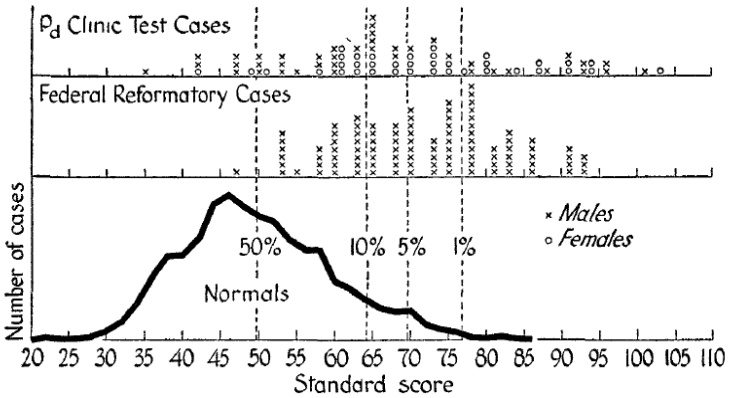
Hathaway & McKinley 1944, p. 155

The normal groups most commonly used for item by item contrast were composed of 339 persons selected from among the general Minnesota normals and of 265 precollege cases from among high school graduates applying for admission to the University. The general sample was divided into 139 men and 200 women, tabulated separately to show sex differences. These persons were between the ages of 26 and 43 inclusive and were all married. They declared themselves to be not under a doctor's care at the time of taking the inventory and are considered normal on that single basis. The modal years of schooling was 8 and few had gone beyond high school These particular persons were used because they were felt most likely to be stable and representative. The tabulation

Hathaway & McKinley 1944, p. 155

To establish the validity of the various scales as they were derived, their power to differentiate test cases from normals was used as an indicator. Test cases is the term used in this paper to designate cases identified relatively or entirely independently of the criterion groups. For the most part, these cases were drawn from among hospitalized patients that were diagnosed routinely by the staff during the preliminary derivation of items and before any scale was made available Where possible, test

Hathaway & McKinley 1944, p. 170



MMPI Background

- By mid-1940s, clear that the scales did not work as intended
  - Non-discriminating profiles (i.e., multiple elevations)
  - Excessive False Positives
- **Paradigm Shift 1**- Code Types:
  - Focus shifts to pattern of scores
  - Scales names replaced with numbers to facilitate code typing
  - Empirical studies conducted to identify code-type correlates

MMPI Background

- **Paradigm Shift 2** – Content-Based Assessment
  - Item content largely ignored in Clinical Scale construction
  - Began to play role in interpretation with several developments in the 1950s:
    - Welsh Factor Scales
    - Harris-Lingoes subscales
    - Weiner-Harmon subscales
  - Content used by Wiggins to construct a set of scales in the 1960s

MMPI Background

- Appraisals and Thoughts about Revision:
  - By late 1950s, MMPI becomes most widely used and studied objective measure of personality
  - Scholarly appraisals are more negative
  - Including Hathaway himself:

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MMPI Background

Hathaway (1960)

> Our most optimistic expectation was that the methodology of the new test would be so clearly effective that there would soon be better devices with refinements of scales and general validity. We rather hoped that we ourselves might, with five years experience, greatly increase its validity and clinical usefulness, and perhaps even develop more solidly based constructs or theoretical variables for a new inventory.

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MMPI Background

Hathaway (1972)

> If another twelve years were to go by without our having gone on to a better instrument or procedure for the practical needs [it fulfills,] I fear that the MMPI, like some other tests, might have changed from a hopeful innovation to an aged obstacle.

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MMPI Background

- Appraisals and Thoughts about Revision:
  - In 1970, *Fifth Annual MMPI Research Symposium*, convened in honor of Hathaway, devoted to discussion of whether and, if so, how to revised the MMPI
    - Produces book: *Objective Personality Assessment: Changing Perspectives* (Butcher, 1972)
    - Includes chapters by conference attendees
    - Jackson (1971) also weighs in
    - Meehl responds in final chapter (his last word on the MMPI)

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Jackson (1971, p. 232)

The first general principle is that *personality measures will have broad import and substantial construct validity to the extent, and only to the extent, that they are derived from an explicitly formulated, theoretically based definition of a trait.* This principle is based on the broad assumption that every

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Jackson (1971, p. 232)

Cronbach and Meehl (1955) have suggested that empirically derived scales might serve to enrich understanding by a bootstrapping technique, much as in the manner of Alfred Binet, who, when he started, purportedly knew little more about intelligence than was contained in teachers' criterion ratings of bright and dull pupils. But such a procedure is justified only under circumstances of complete or almost totally complete ignorance. Ordinarily, psycholo-

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Norman (1972, p. 60)

Thus, I come not to bury the Mult *nor* to praise it. The first would surely be premature, and the second unnecessary. Instead, I propose to consider some general issues and problems of theory construction, diagnosis, and measurement and relate them to some of the present characteristics and uses of the MMPI.

Norman (1972, p. 64)

Let us begin with the original criterion categories. Whether or not Kraepelinian nosology was an appropriate system on which to base a psychiatric diagnostic instrument in the early 1940s, its relevance for that purpose in the late 1960s has surely become tenuous, at best. In one respect, the MMPI already reflects this shift away from classical terminology by the substitution of numerical designations for the old scale names and by the shift in interpretative emphasis from the original, single scales to profile code types. But the scales themselves have remained, by and large, unaltered in this process. Whatever justification each scale derived initially from the nosological category it was designed to map is rapidly vanishing, if not already lost.

Norman (1972, p. 82)

ever. The MMPI itself, especially when given to "normal" subjects, displays a large first factor variously known as "alpha," "A," "ego strength," "social desirability," or "general pathology" depending on one's predilections. But, in general, with adequate domain sampling of traits and with application to relevant populations, a general personality factor seems less likely to appear or to be interpretable than is true in the ability and aptitude area. When such a factor is present, however, I would argue that clarity of interpretation and meaningfulness of the assessments are likely to be best served by dealing with such a component separately from the others implicit in the residual sources of variation.

Meehl (1972, p. 150)

other. I now think that at all stages in personality test development, from initial phase of item pool construction to a late-stage optimized clinical interpretative procedure for the fully developed and "validated" instrument, theory—and by this I mean all sorts of theory, including trait theory, developmental theory, learning theory, psychodynamics, and behavior genetics—should play an important role. In this view I seem to diverge from my

Meehl (1972, p. 155)

sentence completion responses elicited from large numbers of patients. I now believe (as I did not formerly) that an item ought to make theoretical sense, and without too much *ad hoc* "explaining" of its content and properties. But going in the other direction, I would still argue that if an item has really stable psychometric (internal and external) properties of such-and-such kinds, it is the business of a decent theory to "explain" its possession of those properties in the light of its verbal content. If the theory can't handle such

Meehl (1972, p. 157)

Having used the schizotype as an example, I cannot refrain from a cautionary comment about Dr. Norman's (otherwise sound and helpful) contribution, where he permits himself the usual psychologist's dogma that the old Kraepelinian nosological categories are not worth anything. This statement is constantly repeated by psychologists and it is, so far as I am aware, not satisfactorily documented. Contrariwise, a fair-minded reading of the literature should convince Dr. Norman that the prognostic and treatment-selective power of our major nosological rubrics is at least as good as that of any existing "psychodynamic" assessment (by clinical interview) or any existing psychometric device, structured or projective.

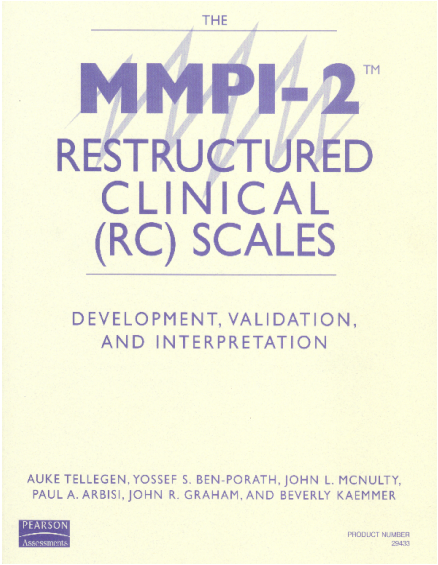
Meehl (1972, pp. 170-171)

Unfortunately, one can achieve a moderate and sometimes rather high elevation on Scale 4 without being a sociopath—not surprising when we look at the items scored for this variable. Life-history type admissions about family [illegible] the sociopathic from the nonsociopathic delinquent teenager or young adult. At an increment of two or three *T*-score points per raw score item shift, it takes less than ten items in the combined areas of family strife and "institution troubles" to achieve a *T*-score at $T = 70$. We all recognize today that this kind of thing happens, and is one source of error which we attempt to "correct for" mentally by taking the patient's situation into account as well as looking at the rest of his profile. But it would be nicer if such error were eliminated from the P_d key entirely. As a factor analyst once complained to me during a heated discussion on criterion keying, internal consistency, scale "purity," and related topics, "If you Minnesotans are going to eyeball the profile and do a subjective factor analysis in your head that way, why not let the computer do it better, at the stage of key construction?" Not an easy argument to answer.

MMPI-2 (1989)

- New Norms
- Clinical Scales left intact
- New items introduced via Content Scales
- New Validity Scales
- Initial Skepticism
- Relatively quick acceptance by clinicians
- Disappointment by (some of) the scholarly community

CHAPTER 2: RESTRUCTURED CLINICAL (RC) SCALES



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Why Restructure the Clinical Scales?

- While they contain compelling informative *items*, it has long been recognized that as *aggregate measures* the Clinical Scales are not psychometrically optimal:
  - Excessive intercorrelations
  - Item overlap
  - Over-inclusive content (including "subtle" items)
- Pre-RC Scale Solutions:
  - Code types
  - Subscales
  - Supplementary Scales

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Developing the RC Scales

- Step 1: Defining and Capturing Demoralization

  it is generally the case that correlations between measures of adjustment tend to be substantial, giving rise to a large—sometimes very large—general demoralization or subjective discomfort factor in such inventories as the MMPI. . . . One challenge in developing new self-report scales is to find ways of *not* measuring this general factor. (Tellegen, 1985, p. 692)

INTERPRETING THE MMPI 2 RF

Developing the RC Scales

- Step 1: Defining and Capturing Demoralization
  - Tellegen's concept of Demoralization similar to that of Jerome Frank:
    - only a small proportion of persons with psychopathology come to therapy; apparently something else must be added that interacts with their symptoms. This state of mind, which may be termed "demoralization," results from persistent failure to cope with internally or externally induced stresses. . . . Its characteristic features, not all of which need to be present in any one person, are feelings of impotence, isolation, and despair. (Frank, 1974 p. 271)
  - Capturing Demoralization guided by Tellegen's research on Mood

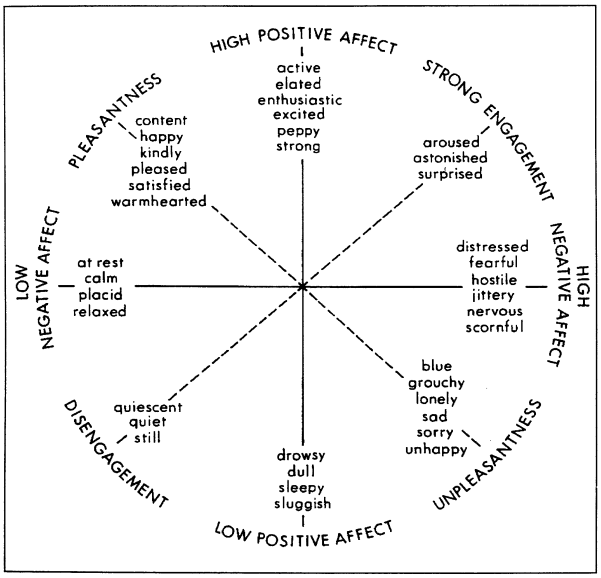

Fig. 1. Watson and Tellegen's (1985) two-dimensional map.

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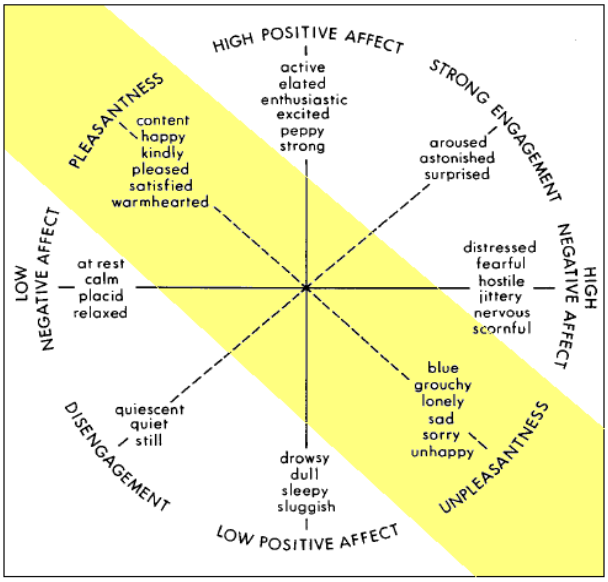

Fig. 1. Watson and Tellegen's (1985) two-dimensional map.

Developing the RC Scales

- Step 1: Defining and Capturing Demoralization
  - Factor analysis of items of Clinical Scales 2 and 7 (measures of depression and anxiety) leads to identification of a set of items that load on a common factor
  - Identified items denote features of demoralization:
    - Unhappiness
    - Poor self-concept
    - Feeling overwhelmed
    - Desire to give up
  - Consistent with Tellegen's and Frank's conceptualizations

Developing the RC Scales

- Step 2: Identifying Clinical Scale Core Components
  - Assumption: Each clinical scale includes at least one major distinctive core component
  - Method: Factor analyses of the items of each of the ten Clinical Scales along with the Demoralization markers identified in Step 1
  - Outcome: Subset of Clinical Scale items marking a major distinctive core component of each scale of the ten scales (2 sets for Scale 5)

Developing the RC Scales

- Step 3: Deriving Seed Scales
  - Goal: Optimize internal coherence and mutual distinctiveness of eventual RC Scales
  - Method:
    - Only items with highest loading on the component marker for which they were designated are retained (yields 11 non-overlapping provisional seed scales)
    - Deletion of items that did not correlate sufficiently, or consistently highest with designated provisional seed scale
    - Addition of 12th seed scale representing Demoralization (deleting 4 weakest items from demoralization markers used in Step 2)
  - Outcome: 12 Seed Scales made up of relatively small, mutually exclusive subsets of original Clinical Scale items

Developing the RC Scales

- Step 4: Deriving the Final RC Scales
  - Goal: Build on structural changes attained in Steps 1-3 by recruiting additional items from the entire MMPI-2 pool (including new MMPI-2 items)
  - Method:
    - Calculate correlations between the 12 Seed Scales and 567 MMPI-2 items in four samples
    - Add item to Seed Scale if:
      - Correlation with that seed higher than the 11 others
      - Correlation with that seed was "high enough"
      - Correlations with the remaining seeds were "low enough"
    - Calculate correlations between resulting items and available external criteria for some scales (small number deleted at this point)
  - Outcome: 9 RC Scales (Seeds for Clinical Scales 5 and 0 not used to derive final RC Scales)

Delineating the RC Scale Constructs

- RCd – Demoralization
  - Happy/Unhappy Pleasant/Unpleasant dimension of mood
  - Dohrendwend: Analogous to taking patient's temperature in medicine (i.e., indicates a problem and its severity, but not etiology)
  - Items reflect dysphoric affect, distress, self-attributed inefficacy, low self esteem, and a sense of having given up
  - Associated with increased risk for suicidal ideation and recent suicide attempt

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Delineating the RC Scale Constructs

- RCd – Demoralization
  - Considerable phenotypic overlap with depression, however
    - Vegetative symptoms such as poor sleep, low appetite, and anhedonia are more specific to depression
    - Dysphoric affect found in medical patients more likely to be a product of demoralization, than depression
    - When asked about their mood, patients/clients who are demoralized are more likely to complain about depression and anxiety

Delineating the RC Scale Constructs

- RC1 – Somatic Complaints
  - Unexplained somatic complaints long a focus of medicine (e.g., *Hysteria*=wandering uterus in ancient Egypt)
  - 19th century French psychiatrist Briquet attributes symptoms to nervous system
  - Charcot and Janet, after collaborating with Freud conceptualize as a *disease of the mind*, adopting his notion of *conversion* – psychological trauma converted into physical symptoms
  - In DSM-IV conditions labeled *Somatoform Disorders*
  - DSM-5 rebranded *Somatic Symptom Disorders*

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Delineating the RC Scale Constructs

- RC2 – Low Positive Emotions
  - Lack of positive emotional responsiveness, anhedonia, is a core personological risk factor for depression
  - But not unique to depression; can also occur in Schizophrenia, PTSD, and certain medical conditions
  - In depression, low positive emotions associated with greater likelihood of biologically (rather than situationally)-linked depression, and hence may be more amenable to treatment with antidepressant medication (Klein, 1974)

Delineating the RC Scale Constructs

- RC3 – Cynicism
  - Degree to which individual holds misanthropic, negativistic, and mistrusting view of others
  - Beliefs are non-self-referential
  - Dysfunction is largely interpersonal
  - "Active ingredient" in Type A Personality associated with increased risk for cardiovascular disease
  - Risk factor for burnout and misconduct in law enforcement officers

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Delineating the RC Scale Constructs

- RC4 – Antisocial Behavior
  - Core feature of Antisocial Personality Disorder and, depending upon model, either core feature or consequence of Psychopathy
  - Item pool includes several elements of diagnostic criteria for ASPD, but not all
  - Also includes substance abuse and familial discord items that are not associated with specific ASPD diagnostic criteria
  - Hence, Antisocial Behavior and ASPD are not veridical

Delineating the RC Scale Constructs

- RC6 – Ideas of Persecution
  - Self-referential beliefs that one is being singled out for mistreatment
  - Persecutory beliefs are a feature of *Paranoia*, but can stem from other causes as well
    - Actually being persecuted (refugees, racial minorities)
    - Projection of blame for shortcomings or difficulties onto others
    - Alienation

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Delineating the RC Scale Constructs

- RC6 – Ideas of Persecution
  - Freeman (2007) characterized paranoia as a hierarchical phenomenon, characterized by five levels of perceived threat ranging from
    (1) Social evaluative concerns (fear of rejection and feelings of vulnerability)
    (2) Ideas of reference (being talked about or watched by others)
    (3) Mild threat (people trying to cause minor distress such as irritation)
    (4) Moderate threat (people going out of their way to get at the individual)
    (5) Severe threat (people trying to cause significant physical, psychological, or social harm to the individual)
  - RC6 items fall mainly in mild to severe range

Delineating the RC Scale Constructs

- RC7 – Dysfunctional Negative Emotions
  - A personality trait characterized by a tendency to worry, be anxious, feel victimized and resentful, be angry, and appraise situations generally in ways that foster negative emotions
  - Is correlated with, but distinct from Demoralization, which is associated more specifically with dissatisfaction, unhappiness, and distress
  - Associated with increased risk for anxiety-related psychopathology

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Delineating the RC Scale Constructs

- RC8 – Aberrant Experiences
  - Sensory, perceptual, cognitive, and motor experiences that fall well outside the range of normal experiences
  - Associated with, but not unique to thought disturbance
  - Items include positive symptoms of Schizophrenia, such as hallucinations (e.g., visual, auditory), and non-persecutory delusions (e.g., thought broadcasting)
  - Associated with increased risk for psychotic disorder, but can co-occur with other conditions (e.g., dissociative symptoms of PTSD)

Delineating the RC Scale Constructs

- RC9 – Hypomanic Activation
  - Focuses primarily on Kraepelin's:
    - *Manic Temperament*, marked by constitutional excitability, carelessness, and marked self-confidence
    - *Irritable Temperament*, marked by irritability, volatility, and occasional outbursts of violence
  - Some items also focus on Kraepelin's *manic states*, associated with pressure of activity
  - Most individuals with hypomanic personality traits do not go on to develop a full fledged bi-polar disorder, but it is associated with elevated risk for this condition

Empirical Findings with the RC Scales

- Reported in MMPI-2-RF Technical Manual and an extensive peer-reviewed literature
  - Adequate reliability
  - Good evidence of construct validity
  - Broad range of replicable empirical correlates reflected in interpretive recommendations in MMPI-2-RF Manual for Administration, Scoring, and Interpretation

Appraisals of the RC Scales

- Positive appraisals based on data analyses that included external criteria
- Negative appraisals based on beliefs about the nature of the constructs assessed by the Clinical Scales and "internal" analyses limited to correlations between subsets of MMPI-2 items
  - Smaller number of elevated scales does not reflect low sensitivity, but rather greater discriminant validity
  - "Construct Drift" is actually "Construct Shift"

CHAPTER 3: MMPI-2-RF SUBSTANTIVE SCALES

MMPI-2-RF Substantive Scales

The introduction of the RC Scales may stimulate additional MMPI-2 scale development. It may prove worthwhile to search for and measure distinctive core features of important MMPI-2 scales other than the MMPI-2 Clinical Scales, some of which may also be confounded with a strong Demoralization component. Investigations along these lines may lead to additional measures that are incrementally informative beyond the RC Scales. Through such efforts it may be possible eventually to capture the full range of attributes represented by the large body of MMPI-2 constructs with a set of new scales more transparent and effective than those currently available. (Tellegen, Ben-Porath, McNulty, Arbisi, Graham & Kaemmer, 2003, pp. 85–86)

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Substantive Scales

- RC Scales not intended to assess everything that can be measured with the MMPI-2 item pool
- Goal in completing the MMPI-2-RF:
  - A comprehensive set of measures representing the clinically significant substance of the entire MMPI-2 item pool
- Five additional sets of scales:
  - Higher-Order
  - Specific Problems
  - Interest
  - PSY-5
  - Validity

MMPI-2-RF Substantive Scales

- Higher-Order Scales – Background:
  - Ongoing search for meaningful structural model to provide an organizing descriptive framework for psychological assessment and psychodiagnosis
  - Factor analyses of "normal" and clinical personality measures yield similar structures:
    - Primary constructs to emerge from factor analyses:
      - Clinical*: Internalizing* and *Externalizing Psychopathology*
      - Normal: *Positive Emotionality*, *Negative Emotionality*, *Constraint*
    - Missing Construct: *Thought Dysfunction*

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MMPI-2-RF Substantive Scales

- Higher-Order Scales – Development:
  - RC Scales provide an opportunity for a "fresh" analysis
  - Factor analyses of the RC Scales identify three higher-order dimensions marked by
    - RCd, RC2, RC7
    - RC6, RC8
    - RC4, RC9
  - Combined items of these scales factor analyzed and three factor scores generated
  - Three factor scores correlated with 567 MMPI-2 items
  - A set of items selected for each scale to produce diverse and distinctive markers associated statistically and conceptually with one, but not the other two higher-order factors

MMPI-2-RF Substantive Scales

- Higher-Order Scales - Outcome:
  - EID - **Emotional/Internalizing Dysfunction**
  - THD – **Thought Dysfunction**
  - BXD – **Behavioral/Externalizing Dysfunction**
- Two applications of H-O Scales:
  - Dimensional measures allow for identification of more than one broad domains of dysfunction (and indication of relative prominence)
  - Organizing framework for MMPI-2-RF interpretation

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MMPI-2-RF Substantive Scales

- Specific Problems and Interest Scales - Objectives:
  - Augment H-O and RC Scales with measures needed to achieve comprehensive instrument that assesses the broad range of constructs measurable with the MMPI-2 item pool:
    - Constructs assessed by Clinical Scales 5 and 0
    - Clinical Scale components not assessed by the RC Scales (e.g., a "social anxiety" component contained in the items of Clinical Scale 3)
    - More narrowly-focused facets of some RC Scales (e.g., substance abuse within the item pool of RC4)
    - Clinically significant attributes not represented in either the Clinical or RC Scales (e.g., suicidality)

MMPI-2-RF Substantive Scales

- Specific Problems and Interest Scales – Development:
  - Iterative process relying on methods similar to those used in developing the RC Scales
  - A set of items representing targeted constructs factor analyzed along with Demoralization markers
  - Seed Scales assembled by selecting items not overly correlated with Demoralization or other targeted item sets
  - Seed scales correlated with 567 MMPI-2 items to identify ones sufficiently correlated with a specific seed and more so than with the others
  - Deletion of items that reduced internal consistency
  - Examination of empirical correlates

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MMPI-2-RF Substantive Scales

- Specific Problems and Interest Scales – Outcome:
  - 5 Somatic/Cognitive Scales
  - 9 Internalizing Scales
  - 4 Externalizing Scales
  - 5 Interpersonal Functioning Scales
  - 2 Interest Scales

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MMPI-2-RF Substantive Scales

- **Somatic/Cognitive**
  - MLS: **Malaise** – Overall sense of physical debilitation, poor health (perceived functional incapacity)
  - GIC: **Gastrointestinal Complaints** – Nausea, recurring upset stomach, and 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

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MMPI-2-RF Substantive Scales

- **Internalizing (RCd Facets)**:
  - SUI: **Suicidal/Death Ideation** – Direct reports of suicidal ideation and recent attempts
  - 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

MMPI-2-RF Substantive Scales

- **Internalizing (RC7 Facets)**:
  - ➢STW: **Stress/Worry** -- Preoccupation with disappointments, difficulty with time pressure
  - ➢AXY: **Anxiety** – Pervasive anxiety, frights, frequent nightmares
  - ➢ANP: **Anger Proneness** -- Becoming easily angered, impatient with others
  - ➢BRF: **Behavior-Restricting Fears** -- Fears that significantly inhibit normal behavior
  - ➢MSF: **Multiple Specific Fears** -- Fears of blood, fire, thunder, etc.

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MMPI-2-RF Substantive Scales

- **Externalizing**:

RC4 Facets

  - ➢ JCP: **Juvenile Conduct Problems** – Difficulties at school and at home, stealing
  - ➢ SUB: **Substance Abuse** – Current and past misuse of alcohol and drugs

RC9 Facets

  - ➢ AGG: **Aggression** – Physically aggressive, violent behavior
  - ➢ ACT: **Activation** – Heightened excitation and energy level

MMPI-2-RF Substantive Scales

- **Interpersonal**:
  - FML: **Family Problems** – Conflictual family relationships
  - IPP: **Interpersonal Passivity** – Being unassertive and submissive
  - SAV: **Social Avoidance** – Avoiding or not enjoying social events
  - SHY: **Shyness** – Bashful, prone to feel inhibited and anxious around others
  - DSF: **Disaffiliativeness** – Disliking people and being around them

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MMPI-2-RF Substantive Scales

- **Interests**:
  - AES: **Aesthetic-Literary Interests –** Literature, music, the theater
  - MEC: **Mechanical-Physical Interests –** Fixing and building things, the outdoors, sports

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MMPI-2-RF Substantive Scales

- PSY-5 – Personality Psychopathology-5
  - Developed by Harkness and McNulty (1994) as a dimensional model of Axis II features
  - Began with DSM-III-R Axis II criteria
  - Augmented with items describing psychopathy features and Tellegen's higher-order dimensions of Negative Emotionality, Positive Emotionality, and Constraint
  - Data reduction analyses identify five dimensions
  - Harkness, McNulty, and Ben-Porath (1995) develop MMPI-2 PSY-5 Scales using replicated rational selection
    - Lay judges select MMPI-2 items guided by descriptions of the five dimensions

MMPI-2-RF Substantive Scales

- MMPI-2-RF PSY-5 Scales
  - Revised versions of their MMPI-2 measures of the PSY-5 dimensional model of personality (Axis II) pathology developed by Harkness and McNulty:
    - 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

MMPI-2-RF Substantive Scales

- MMPI-2-RF PSY-5 Scales
  - Provide a validated, dimensional perspective on personality disorder features
    - Very similar to PID-5 model considered for DSM-5 (now designated as needing further research):
      - Negative Affectivity
      - Detachment
      - Antagonism
      - Disinhibit ion vs. Compulsivity
      - Psychoticism

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Substantive Scales

- MMPI-2-RF PSY-5 Scales
    - Can be linked to clusters of DSM-5 Personality disorders:
      - Aggressiveness – Cluster B
      - Psychoticism – Cluster A
      - Disconstraint – Custer B
      - Negative Emotionality/Neuroticism – Cluster C
      - Introversion/Low Positive Emotionality – Cluster C

Empirical Findings Substantive Scales

- Reported in MMPI-2-RF Technical Manual and peer-reviewed literature
  - Adequate reliability

INTERPRETING THE MMPI 2 RF

Reliability and Standard Errors of Measurement of the MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales

	Test-Retest (*rrt*)	Internal Consistency (Alpha)							Standard Error of Measurement (*SEM*)			
	MMPI-2-RF Normative Sample Subset	MMPI-2-RF Normative Sample		Outpatients, Community Mental Health Center		Psychiatric Inpatients, Community Hospital		Psychiatric Inpatients, VA Hospital	Normative (Test-Retest)	Normative (Alpha)		Median Clinical (Alpha)
	Men and Women (*n* = 193)	Men (*n* = 1,138)	Women (*n* = 1,138)	Men (*n* = 410)	Women (*n* = 610)	Men (*n* = 709)	Women (*n* = 473)	Men (*n* = 1,128)	Men and Women (*n* = 193)	Men (*n* = 1,138)	Women (*n* = 1,138)	Men and Women (total *n* = 3,330)
EID	.90	.86	.88	.94	.93	.95	.95	.93	3	4	4	4
THD	.71	.69	.69	.83	.80	.89	.85	.87	5	6	6	6
BXD	.91	.78	.74	.82	.79	.81	.81	.84	3	5	5	5
RCd	.88	.87	.89	.93	.93	.95	.94	.93	4	3	3	3
RC1	.79	.73	.79	.88	.89	.87	.88	.88	5	5	5	5
RC2	.76	.68	.63	.84	.82	.86	.86	.84	5	6	6	6
RC3	.82	.80	.80	.81	.80	.85	.84	.84	4	5	5	5
RC4	.89	.76	.73	.81	.77	.82	.81	.83	3	5	5	6
RC6	.64	.63	.67	.80	.78	.85	.82	.85	6	6	6	7
RC7	.88	.81	.83	.87	.87	.90	.89	.89	4	4	4	5
RC8	.74	.70	.71	.81	.81	.86	.83	.85	5	6	5	6
RC9	.86	.79	.76	.80	.78	.82	.82	.83	4	5	4	5

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Reliability and Standard Errors of Measurement of the MMPI-2-RF Somatic/Cognitive and Internalizing Scales

	Test-Retest (r_{tt})	Internal Consistency (Alpha)							Standard Error of Measurement (*SEM*)			
	MMPI-2-RF Normative Sample Subset	MMPI-2-RF Normative Sample		Outpatients, Community Mental Health Center		Psychiatric Inpatients, Community Hospital		Psychiatric Inpatients, VA Hospital	Normative (Test-Retest)	Normative (Alpha)		Median Clinical (Alpha)
	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men (n = 410)	Women (n = 610)	Men (n = 709)	Women (n = 473)	Men (n = 1,128)	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men and Women (total n = 3,330)
MLS	.82	.59	.65	.82	.76	.79	.78	.78	4	6	6	6
GIC	.75	.64	.69	.74	.79	.71	.75	.74	5	5	6	8
HPC	.78	.59	.68	.78	.79	.75	.77	.77	5	6	6	6
NUC	.54	.52	.58	.74	.78	.73	.74	.75	7	7	7	8
COG	.74	.64	.69	.81	.83	.84	.81	.82	5	6	6	7
SUI	.68	.41	.34	.78	.76	.80	.81	.79	6	8	8	11
HLP	.65	.39	.50	.68	.66	.75	.73	.68	6	8	7	9
SFD	.81	.67	.72	.82	.79	.82	.84	.74	4	5	6	5
NFC	.84	.69	.73	.78	.80	.83	.82	.80	4	5	6	6
STW	.77	.52	.60	.66	.62	.69	.66	.63	5	6	6	7
AXY	.71	.42	.46	.63	.66	.70	.70	.71	5	7	8	10
ANP	.81	.72	.71	.80	.76	.77	.73	.77	4	5	5	6
BRF	.67	.44	.49	.48	.63	.62	.61	.57	6	7	8	9
MSF	.85	.69	.71	.69	.70	.72	.70	.72	4	5	5	5

Reliability and Standard Errors of Measurement of the MMPI-2-RF Externalizing, Interpersonal, and Interest Scales

	Test-Retest (r_{tt})	Internal Consistency (Alpha)							Standard Error of Measurement (*SEM*)			
	MMPI-2-RF Normative Sample Subset	MMPI-2-RF Normative Sample		Outpatients, Community Mental Health Center		Psychiatric Inpatients, Community Hospital		Psychiatric Inpatients, VA Hospital	Normative (Test-Retest)	Normative (Alpha)		Median Clinical (Alpha)
	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men (n = 410)	Women (n = 610)	Men (n = 709)	Women (n = 473)	Men (n = 1,128)	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men and Women (total n = 3,330)
JCP	.85	.65	.56	.74	.69	.75	.71	.71	4	7	6	7
SUB	.87	.62	.62	.74	.66	.77	.74	.74	4	6	6	7
AGG	.78	.66	.58	.75	.70	.76	.71	.71	5	6	6	7
ACT	.77	.60	.60	.59	.64	.73	.75	.75	5	6	6	7
FML	.78	.64	.67	.77	.75	.75	.78	.78	5	6	6	7
IPP	.78	.71	.68	.74	.74	.75	.77	.77	5	5	6	6
SAV	.84	.78	.77	.84	.85	.86	.85	.85	4	5	5	5
SHY	.88	.74	.77	.78	.79	.79	.80	.80	4	5	5	5
DSF	.60	.51	.43	.57	.62	.65	.61	.61	6	8	7	9
AES	.86	.61	.49	.67	.60	.67	.66	.66	4	6	6	6
MEC	.92	.62	.55	.63	.55	.64	.60	.60	3	5	4	6

Reliability and Standard Errors of Measurement of the MMPI-2-RF Personality Psychopathology Five (PSY-5) Scales

	Test-Retest (r_{tt})	Internal Consistency (Alpha)							Standard Error of Measurement (*SEM*)			
	MMPI-2-RF Normative Sample Subset	MMPI-2-RF Normative Sample		Outpatients, Community Mental Health Center		Psychiatric Inpatients, Community Hospital		Psychiatric Inpatients, VA Hospital	Normative (Test-Retest)	Normative (Alpha)		Median Clinical (Alpha)
	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men (n = 410)	Women (n = 610)	Men (n = 709)	Women (n = 473)	Men (n = 1,128)	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men and Women (total n = 3,330)
AGGR-r	.84	.74	.71	.75	.72	.75	.73	.75	4	6	5	5
PSYC-r	.76	.69	.69	.81	.80	.88	.83	.86	5	6	6	6
DISC-r	.93	.72	.69	.72	.70	.73	.73	.75	3	5	5	6
NEGE-r	.85	.76	.78	.83	.81	.84	.84	.82	4	5	5	6
INTR-r	.84	.77	.73	.85	.83	.86	.86	.85	4	5	5	6

Substantive Scales

The test-retest correlations and internal consistency values of the Higher-Order (H-O), Restructured Clinical (RC), and Personality Psychopathology Five (PSY-5) Scales for the most part exceed .80. Alpha values derived from the normative sample are, as expected, somewhat lower because of truncated distributions. Reliability estimates for the Somatic/Cognitive, Internalizing, Externalizing, and Interpersonal Scales are somewhat lower than for the H-O, RC, and PSY-5 Scales, which is to be expected since the Specific Problems (SP) Scales of the MMPI-2-RF are shorter.

*SEM*s are predominantly eight T-score points or lower, and a majority are six points or lower. Exceptions are *SEM*s of shorter and/or more highly truncated measures like Suicidal/Death Ideation (SUI), Helplessness/Hopelessness (HLP), Anxiety (AXY), Behavior-Restricting Fears (BRF), and Disaffiliativeness (DSF), which in the clinical samples range from 9 to 11 points. Larger *SEM* values imply that more extreme T scores are needed to justify clinically significant inferences.

Empirical Findings Substantive Scales

- Reported in MMPI-2-RF Technical Manual and peer-reviewed literature
  - Adequate reliability
  - Good evidence of construct validity
  - Broad range of replicable empirical correlates reflected in interpretive recommendations in MMPI-2-RF Manual for Administration, Scoring, and Interpretation

INTERPRETING THE MMPI 2 RF

Appendix A
External Correlates Tables

Index to Tables by Setting

	Table
Outpatients, Community Mental Health Center	1–24
Psychiatric Inpatients, Community Hospital/VA Hospital	25–72
Mental Health Outpatients, VA Hospital	73–76
Medical Outpatients, VA Hospital	77–80
Substance Abuse Treatment, VA Hospital	81–88
Disability Claimants	89–104
Criminal Defendants	105–128
College Students	129–136

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MMPI-2-RF Technical Manual: Appendix A

- Empirical Correlates in
  - Mental Health
    - Outpatient
    - Inpatient
  - Medical
  - Substance Abuse Treatment
  - Forensic- Civil
  - Forensic- Criminal
  - Non-Clinical

- N= 4,336 Men; 2,337 Women
- 605 Criteria
- 53,970 Correlations

CHAPTER 4: VALIDITY SCALES

MMPI-2-RF Validity Scales

- Protocol Validity versus Instrument Validity
- Threats to Protocol Validity
  - Non-Content-Based Invalid Responding
    - Non-responding
    - Random Responding
      - Intentional
      - Unintentional
        - » Reading Difficulties
        - » Comprehension Deficits
          - Low verbal abilities
          - Non-native English speaker
        - » Disorganization
        - » Mismarked answer sheets
    - Fixed Responding
      - Acquiescence or Counter-acquiescence
      - Problems with double negatives

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Validity Scales

- Threats to Protocol Validity
  - Content-Based Invalid Responding
    - Over-reporting
      - Intentional
        - » Malingering
        - » Factitious Disorder
      - Unintentional
        - » Catastrophizing
        - » Somatoform Disorder
    - Under-reporting
      - Intentional
        - » Denial or minimization
      - Unintentional
        - » Distorted self-concept

MMPI Validity Scales

- Original MMPI Validity Scales (1943)
  - "It is almost as though we inventory-makers were afraid to say too much about the problem because we had no effective solution for it, but it was too obvious a fact to be ignored so it was met by a polite nod." (Meehl & Hathaway, 1946, p. 526)
  - Cannot Say (CNS) – Non-responding
    - Changes dramatically with switch to Group Form
  - Lie (L) – Under-reporting
    - Fashioned after Hartshorne and May Honesty Research
  - Infrequency (F) – Random Protocol
    - Initially designed as a measure of random responding or clerical error
    - Found by military psychologists to be sensitive to over-reporting

INTERPRETING THE MMPI 2 RF

MMPI Validity Scales

- Original MMPI Validity Scales - K
  - K-correction and K Scale added in 1946
  - Developed by Meehl and Hathaway (1946) to serve only as a correction factor to account for under-reporting and over-reporting
  - K Scale adopted as the final standard validity scale of the MMPI in 1946

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MMPI Validity Scales

- Original MMPI Validity Scales and Threats to Protocol Validity:
  - CNS
    - Non-responding
  - L
    - Under-reporting
      - Intentional and unintentional
  - F
    - Content non-responsiveness
    - Over-reporting
      - Intentional and unintentional
  - K
    - Under-reporting
      - Intentional and unintentional

MMPI-2 Validity Scales

- MMPI-2 Validity Scales:
  - MMPI Validity Sales carried over:
    - CNS, L, F, K carried over
      - F loses four items
  - MMPI-2 Validity Scales introduced in 1989:
    - Variable Response Inconsistency – VRIN – Random Responding
    - True Response Inconsistency – TRIN – Fixed Responding
    - F Back (F_B) – Over-reporting
  - MMPI-2 Validity Scales added later:
    - Infrequency Psychopathology – F_P - Over-reporting
    - Superlative Self-Presentation – S – Under-reporting
    - Symptom Validity Scale – FBS (previously Fake Bad Scale) – Over-reporting

MMPI-2-RF Validity Scales: Development

- VRIN-r/TRIN-r
  - Based on inconsistent responses to item pairs
  - Pairs selected in the basis of statistical and semantic analyses of possible response combinations (composites):
    - Both True (TT)
    - Both False (FF)
    - First True and the second False (TF)
    - First False and the second True (FT)

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Validity Scales: Development

- VRIN-r/TRIN-r
  - Each composite chosen for VRIN-r or TRIN-r had to meet five criteria:
    - The items had to be sufficiently correlated with each other (positively for VRIN-r, negatively for TRIN-r) in two clinical samples (seeking statistical inconsistency)
    - The observed frequency of the composite had to be low when compared to the frequency expected by chance if the two responses making up the composite were independent (seeking unlikely response combinations)
    - The combination of responses in a composite had to be judged by the authors to be inconsistent (seeking semantic inconsistency)
    - The correlation between a composite and a mini-scale made up of the two items keyed in the direction they were scored on the composite was low (seeking "content-free" composites)
    - Neither item in a composite could belong to another composite of the same type (eliminate overlap)

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MMPI-2-RF Validity Scales: Development

- TRIN-r Example:

  269. When things get really bad, I know I can count on my family for help.

  314. I hate my whole family

  – Responses are negatively correlated (-.23)
  – Observed/Expected .27 for TT and .93 for FF (TT combination much more unlikely than FF)
  – TT combination is semantically inconsistent
  – Correlation with mini-scale reflecting family problems is -.10 for TT and -.70 for FF (indicating TT combination is content-free)
  – Neither 269 nor 314 could be scored in another TT combination

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Validity Scales: Development

- Over-reporting Scales:
  – F-r (Infrequent Responses):
    - 32 items answered infrequently (10% or less) of the men and women in the normative sample
  – Fp-r (Infrequent Psychopathology Responses):
    - 21 items answered infrequently (20% or less) by psychiatric inpatients, outpatients, and non-clinical samples
  – Fs (Infrequent Somatic Responses):
    - 16 items with somatic content answered infrequently (25% or less) of medical samples
  – FBS-r (Symptom Validity):
    - 30 of 43 FBS items included in 338-item booklet
  – RBS (Response Bias Scale):
    - 28 items correlated with failure on performance validity tests

MMPI-2-RF Validity Scales: Development

- Under-reporting Scales:
  - L-r (Uncommon Virtues):
    - 14 items describing uncommon moral virtues
  - K-r (Adjustment Validity):
    - 14 items describing good psychological adjustment

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Validity Scales: Empirical Findings

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Psychometric Findings with the MMPI-2-RF Validity Scales

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Reliability

- Reported in Chapter 3 of MMPI-2-RF Technical Manual

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Table 3-2.

Reliability and Standard Errors of Measurement for the MMPI-2-RF Validity Scales

	Test-Retest (r_{tt})	Internal Consistency (Alpha)							Standard Error of Measurement (*SEM*)			
	MMPI-2-RF Normative Sample Subset	MMPI-2-RF Normative Sample		Outpatients, Community Mental Health Center		Psychiatric Inpatients, Community Hospital		Psychiatric Inpatients, VA Hospital	Normative (Test-Retest)	Normative (Alpha)		Median Clinical (Alpha)
	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men (n = 410)	Women (n = 610)	Men (n = 709)	Women (n = 473)	Men (n = 1,128)	Men and Women (n = 193)	Men (n = 1,138)	Women (n = 1,138)	Men and Women (total n = 3,330)
VRIN-r	.52	.39	.20	.33	.24	.27	.16	.24	7	9	8	9
TRIN-r	.40	.37	.23	.37	.27	.41	.27	.40	8	9	8	8
F-r	.82	.69	.71	.85	.85	.88	.87	.87	4	6	5	10
Fp-r	.71	.41	.41	.57	.53	.60	.47	.54	4	8	8	10
Fs	.51	.40	.45	.64	.68	.66	.60	.65	7	8	7	12
FBS-r	.72	.50	.56	.75	.76	.71	.75	.74	5	6	7	8
L-r	.79	.60	.61	.65	.64	.63	.57	.57	5	6	6	7
K-r	.84	.67	.68	.74	.67	.76	.75	.72	4	6	6	6

INTERPRETING THE MMPI 2 RF

Validity Scales

In considering the reliabilities of the Validity Scales (Table 3-2), we have to bear in mind that in study samples consisting of largely cooperative and test-competent individuals, one does not expect to encounter large and reliable variations in invalid responding. Therefore, one would not expect the reliabilities of these measures to be very high. Nonetheless, the low reliability coefficients of the two inconsistency measures, VRIN-r and TRIN-r, do stand out. But even these results are not surprising because, of the eight Validity Scales, only these two measures were designed to be content-free: indices of quasi-random response variations and response stereotypy, respectively. And since the variances of VRIN-r and TRIN-r (see Appendix D) are low as well (as would be expected), the standard errors of the two scales are small enough to support the recommended cutoff scores for declaring a test protocol invalid.

Validity

- Validation studies reported in peer-reviewed literature
- Examples:

Examining the Impact of Unscorable Item Responses on the Validity and Interpretability of MMPI-2/MMPI-2-RF Restructured Clinical (RC) Scale Scores

Assessment
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Abstract

This article examined the impact of unscorable item responses on the psychometric validity and practical interpretability of scores on the Restructured Clinical (RC) Scales of the Minnesota Multiphasic Personality Inventory-2/Minnesota Multiphasic Personality Inventory-2–Restructured Form (MMPI-2/MMPI-2-RF). In analyses conducted with five archival samples, we found that relatively large proportions of unscorable responses (defined as 10% or more of the items scored on a scale) were relatively uncommon, occurring most often in forensic samples. Simulated unscorable responses were inserted in varying proportions (10% to 90 %) in place of the responses of participants in two of the archival samples for which criterion data were available. Analyses were conducted to gauge the impact of unscorable responses on the criterion validity of scores on these scales and their interpretability. Impact on validity was evaluated by examining correlations with extra-test variables as a function of increasing levels of unscorable responding. Interpretability was evaluated by examining the proportion of participants who produced clinically elevated RC Scale scores as a function of unscorable responding. Results indicate that whereas scale score validity was relatively robust up to a level of 50% unscorable responses, interpretability was substantially compromised at only 10% unscorable responding. This suggests that prorated scores may be used to correct for the impact of unscorable responses on the interpretability of RC Scale scores at levels as high as 50% unscorable responses. Classification analyses supported this possibility. Further steps needed to explore the feasibility of using prorated scores are discussed.

Table 1. Percentage of Individuals With 10% or More Unscorable Responses on Each Restructured Clinical (RC) Scale in Various Samples

	Sample				
Scale	Outpatient $N = 1,219$	Inpatient $N = 1,872$	Forensic $N = 1,592$	Employment $N = 284$	Intervention $N = 483$
RCd (24 items)	1.2[a]	0.9	1.9	1.8	1.5
RC1 (27 items)	0.7	0.5	1.6	1.4	0.7
RC2 (17 items)	1.2	1.1	2.3	2.1	1.8
RC3 (15 items)	2.1	2.2	2.8	0.4	4.0
RC4 (22 items)	0.5	0.4	1.7	1.8	1.8
RC6 (17 items)	1.4	1.5	3.0	2.1	1.5
RC7 (24 items)	0.9	0.7	1.8	0.7	1.5
RC8 (18 items)	1.3	1.1	2.4	2.1	2.0
RC9 (28 items)	1.1	1.2	2.1	1.4	1.5
Any scale	4.3	4.0	5.9	4.3	7.5

Note. Intervention = Court-ordered intervention program.
a. Numbers are percentage of people in the sample with greater than 10% of unscorable responses on each scale.

INTERPRETING THE MMPI 2 RF

Table 2. Percentage of Patients with Elevations at or above 65T: Outpatients ($n = 804$)

	Percentage Unscorable Responses Inserted								
Scale	None	10	20	30	40	50	60	70	80
RCd	54/54	46/44	40/36	30/17	18/4	5/—[a]	—/—	—/—	—/—
RC1	37/43	31/37	28/29	21/22	19/15	12/5	3/1	—/—	—/—
RC2	33/45	26/37	17/26	5/10	5/13	—/3	—/—	—/—	—/—
RC3	15/22	6/11	2/4	—/—	—/—	—/—	—/—	—/—	—/—
RC4	36/37	27/26	16/19	8/12	4/6	—/1	—/—	—/—	—/—
RC6	36/34	30/29	29/26	22/17	21/17	15/14	9/7	5/3	1/1
RC7	28/28	20/18	14/10	7/3	3/—	1/—	—/—	—/—	—/—
RC8	19/18	15/16	13/13	10/8	5/4	3/3	1/—	—/—	—/—
RC9	11/9	4/4	—/1	—/—	—/—	—/—	—/—	—/—	—/—
Any	80/85	75/79	68/75	56/57	49/49	32/32	17/15	5/5	2/1

Note. Percentages for men ($n = 327$) are before the forward slash, and percentages for women ($n = 477$) are after the forward slash.
a. Dashes indicate that less than half of 1% of the indicated sample was elevated on that scale.

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Table 3. Percentage of Patients with Elevations at or above 75T: Outpatients (n = 804)

	Percentage Unscorable Responses Inserted								
	None	10	20	30	40	50	60	70	80
RCd	31/25	20/11	11/2	—/—[a]	—/—	—/—	—/—	—/—	—/—
RC1	21/20	16/13	12/7	7/3	4/1	2/1	—/—	—/—	—/—
RC2	19/20	13/13	6/6	—/—	—/—	—/—	—/—	—/—	—/—
RC3	4/4	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
RC4	11/9	4/5	1/2	—/1	—/—	—/—	—/—	—/—	—/—
RC6	8/9	4/7	3/4	1/1	1/1	—/—	—/—	—/—	—/—
RC7	11/9	4/3	1/—	1/—	—/—	—/—	—/—	—/—	—/—
RC8	7/5	5/4	3/2	1/1	—/—	—/—	—/—	—/—	—/—
RC9	3/2	1/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Any	58/59	42/45	32/30	13/12	8/7	2/2	—/—	—/—	—/—

Note. Percentages for men (n = 327) are before the forward slash, and percentages for women (n = 477) are after the forward slash.
a. Dashes indicate that less than half of 1% of the indicated sample was elevated on that scale.

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Psychometric Functioning of the MMPI-2-RF VRIN-r and TRIN-r Scales With Varying Degrees of Randomness, Acquiescence, and Counter-Acquiescence

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In the present study, the authors evaluated the effects of increasing degrees of simulated non-content-based (random or fixed) responding on scores on the newly developed Variable Response Inconsistency-Revised (VRIN-r) and True Response Inconsistency-Revised (TRIN-r) scales of the Minnesota Multiphasic Personality Inventory-2 Restructured Form (MMPI-2-RF; Y. S. Ben-Porath & A. Tellegen, 2008) and compared the performance of these new scales with the existing VRIN and TRIN scales of the MMPI-2 (J. N. Butcher et al., 2001). The results support the interpretation of VRIN-r and TRIN-r scores as measures of random and fixed responding, respectively. Furthermore, the authors examined how scores on the Restructured Clinical (RC) scales (A. Tellegen et al., 2003) are affected by increasing levels of non-content-based responding and offer practical interpretive recommendations for test users. Finally, the results of the present study indicate that RC validity coefficients are relatively robust in the face of moderate degrees of non-content-based responding.

Table 1
MMPI-2 VRIN and MMPI-2-RF VRIN-r Mean T-Scores and Percentage of Cases With T-Scores ≥ 80 for Varying Degrees of Random Response Insertion—Normative Sample (n = 2,109)

Random insertion percentage	VRIN		Percentage ≥ *T*-score of 80	VRIN-r		Percentage ≥ *T*-score of 80
	M	*SD*		*M*	*SD*	
0%	49.6	9.8	0.4	49.5	9.5	0.5
10%	57.6	10.3	2.5	57.1	10.6	2.5
20%	65.0	10.6	9.3	64.3	10.8	8.1
30%	71.5	11.2	24.7	70.4	11.9	21.0
40%	77.4	11.5	43.8	76.0	12.7	36.8
50%	82.0	11.6	58.7	81.5	12.8	53.7
60%	86.6	12.0	73.3	86.0	13.7	66.5
70%	89.8	12.4	80.2	90.0	13.6	77.0

Note. MMPI-2 = Minnesota Multiphasic Personality Inventory-2; MMPI-2-RF = Minnesota Multiphasic Personality Inventory-2-Restructured Form; VRIN = Variable Response Inconsistency; VRIN-r = Variable Response Inconsistency-Revised.

INTERPRETING THE MMPI 2 RF

Table 2
MMPI-2 TRIN and MMPI-2-RF TRIN-r Mean T-Scores and Percentage of Cases With T-Scores ≥ 80 for Varying Degrees of True-Response Insertion—Normative Sample (n = 2,130)

True-insertion percentage	TRIN		Percentage ≥ *T*-score of 80T	TRIN-r		Percentage ≥ *T*-score of 80T
	M	*SD*		*M*	*SD*	
0%	50.2F	9.4	0.6	50.2F	9.3	0.8
10%	58.9T	11.4	6.5	59.5T	11.8	8.0
20%	67.7T	12.8	25.3	69.7T	13.2	29.4
30%	77.3T	14.1	52.4	79.9T	14.5	58.8
40%	87.6T	14.9	78.0	90.1T	15.0	82.3
50%	97.4T	14.4	93.1	101.1T	15.0	95.2
60%	108.3T	14.0	98.9	113.1T	14.7	99.3
70%	119.0T	13.2	99.8	125.5T	13.4	100.0

Note. MMPI-2 = Minnesota Multiphasic Personality Inventory-2; TRIN = True Response Inconsistency; MMPI-2-RF = Minnesota Multiphasic Personality Inventory-2-Restructured Form; TRIN-r = True Response Inconsistency-Revised; T = True; F = False.

Table 3
MMPI-2 TRIN and MMPI-2-RF TRIN-r Mean T-Scores and Percentage of Elevated Cases for Varying Degrees of False-Response Insertion—Normative Sample (n = 2,130)

False-insertion percentage	TRIN		Percentage ≥ *T*-score of 79F	TRIN-r		Percentage ≥ *T*-score of 80F
	M	*SD*		*M*	*SD*	
0%	50.2F	9.4	0.5	50.2F	9.3	0.6
10%	56.4F	10.4	3.1	57.3F	10.8	4.0
20%	62.2F	11.3	11.1	64.7F	12.4	16.5
30%	68.9F	11.6	27.5	72.0F	12.6	36.0
40%	75.3F	11.6	49.5	80.5F	13.6	62.3
50%	81.9F	12.0	70.2	88.5F	13.5	81.1
60%	88.8F	11.5	87.5	96.7F	12.9	94.0
70%	95.5F	10.3	96.9	105.1F	12.2	99.1

Note. MMPI-2 = Minnesota Multiphasic Personality Inventory-2; TRIN = True Response Inconsistency; MMPI-2-RF = Minnesota Multiphasic Personality Inventory-2-Restructured Form; TRIN-r = True Response Inconsistency-Revised; T = True; F = False.

INTERPRETING THE MMPI 2 RF

Utility of the MMPI–2-RF (Restructured Form) Validity Scales in Detecting Malingering in a Criminal Forensic Setting: A Known-Groups Design

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The current study examined the utility of the recently released Minnesota Multiphasic Personality Inventory—2 Restructured Form (MMPI–2-RF; Ben-Porath & Tellegen, 2008) validity scales to detect feigned psychopathology in a criminal forensic setting. We used a known-groups design with the Structured Interview of Reported Symptoms (SIRS; Rogers, Bagby, & Dickens, 1992) as the external criterion to determine groups of probable malingering versus nonmalingering. A final sample of 125 criminal defendants, who were administered both the SIRS and the MMPI–2-RF during their evaluations, was examined. The results indicated that the two MMPI–2-RF validity scales specifically designed to detect overreported psychopathology, F-r and F_P-r, best differentiated between the malingering and nonmalingering groups. These scales added incremental predictive utility to one another in this differentiation. Classification accuracy statistics substantiated the recommended cut scores in the MMPI–2-RF manual (Ben-Porath & Tellegen, 2008) in this forensic setting. Implications for these results in terms of forensic assessment and detection of malingering are discussed.

Table 1
Means, Standard Deviations, F Tests, and Cohen's d Effect Size Estimates for Group Differences

	Malingering group (n = 25)		Nonmalingering groups: With intermediates (n = 98)		Nonmalingering groups: Without intermediates (n = 90)		F test		Effect size	
Scale	M	SD	M	SD	M	SD	F_1	F_2	d_1	d_2
F-r	141.92	23.42	82.00	29.54	79.10	27.37	94.57***	116.55***	2.11	2.37
F_p-r	122.38	35.54	68.94	22.44	66.37	19.32	91.04***	113.41***	2.07	2.34
F_S	98.94	25.87	69.17	24.80	67.06	24.02	29.95***	35.29***	1.19	1.30
FBS-r	86.47	14.03	60.97	16.49	59.47	15.88	53.63***	62.98***	1.59	1.74

Note. F-r = Infrequent Responses; F_p-r = Infrequent Psychopathology Responses; F_S = Infrequent Somatic Complaints; FBS-r = Symptom Validity; F_1 = F test between malingering group and nonmalingering group including intermediates; F_2 = F test between malingering group and nonmalingering group excluding intermediates; d_1 = effect size for difference between malingering group and nonmalingering group including intermediates; d_2 = effect size for difference between malingering group and nonmalingering group excluding intermediates.
*** $p < .001$.

INTERPRETING THE MMPI 2 RF

Table 3
Classification Accuracy Statistics for F-R and F_p-R in Differentiating Between Malingering and Nonmalingering Groups

				BR = .15		BR = .30		BR = .50	
Cutoff score	SN	SP	OCC[a]	PPP	NPP	PPP	NPP	PPP	NPP
F-r									
T = 120	**.89**	**.88/.91**	**.88/.91**	**.56/.64**	**.98/.98**	**.76/.81**	**.95/.95**	**.88/.91**	**.89/.89**
T > 115	.93	.82/.84	.84/.86	.47/.51	.98/.98	.68/.72	.96/.96	.83/.86	.92/.92
T > 105	.96	.78/.80	.82/.84	.43/.46	.99/.99	.65/.67	.98/.98	.81/.83	.95/.96
T > 100	.96	.72/.74	.78/.79	.38/.40	.99/.99	.60/.62	.98/.98	.78/.79	.95/.95
F_p-r									
T > 110	**.67**	**.94/.97**	**.88/.90**	**.66/.78**	**.94/.94**	**.82/.90**	**.87/.87**	**.92/.95**	**.74/.74**
T > 100	.74	.90/.92	.86/.88	.56/.63	.95/.95	.76/.80	.89/.89	.88/.90	.78/.78
T > 90	.74	.85/.88	.81/.85	.46/.52	.95/.95	.67/.72	.88/.89	.83/.86	.77/.77
T > 80	.85	.78/.81	.79/.82	.40/.44	.97/.97	.62/.66	.92/.93	.79/.82	.84/.85

Note. Optimal cut score is set in bold font. Values to the left of a slash are when the nonmalingering group with intermediates is used, whereas values to the right of a slash are when the nonmalingering group without intermediates is used. F-r = Infrequent Responses; F_p-r = Infrequent Psychopathology Responses; SN = sensitivity; SP = specificity; OCC = overall correct classification; BR = base rate; PPP = positive predictive power; NPP = negative predictive power; T = T score.
[a] OCC values are based on base rates in the current sample (.22 and .23 for nonmalingering groups with and without intermediates, respectively).

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Examination of the MMPI-2 Restructured Form (MMPI-2-RF) Validity Scales in Civil Forensic Settings: Findings from Simulation and Known Group Samples

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Abstract

The current study examined the effectiveness of the MMPI-2 Restructured Form (MMPI-2-RF; Ben-Porath and Tellegen, 2008) over-reporting indicators in civil forensic settings. The MMPI-2-RF includes three revised MMPI-2 over-reporting validity scales and a new scale to detect over-reported somatic complaints. Participants dissimulated medical and neuropsychological complaints in two simulation samples, and a known-groups sample used symptom validity tests as a response bias criterion. Results indicated large effect sizes for the MMPI-2-RF validity scales, including a Cohen's *d* of .90 for Fs in a head injury simulation sample, 2.31 for FBS-r, 2.01 for F-r, and 1.97 for Fs in a medical simulation sample, and 1.45 for FBS-r and 1.30 for F-r in identifying poor effort on SVTs. Classification results indicated good sensitivity and specificity for the scales across the samples. This study indicates that the MMPI-2-RF over-reporting validity scales are effective at detecting symptom over-reporting in civil forensic settings.

Keywords: MMPI-2-RF; MMPI-2 Restructured Form; Malingering; Forensic evaluation; Medico-legal

INTERPRETING THE MMPI 2 RF

Table 2. Comparison between Head Injury Simulation groups ($n = 23$) and head injury controls ($n = 23$) in Head Injury Simulation sample

	Head Injury Controls		Head Injury Simulation Group		*t*(44)	*p*-value	*d*-value
	Mean *T*-score	*SD*	Mean *T*-score	*SD*			
F-r	66.5	19.9	91.2	40.2	2.64	.011	.78
Fp-r	54.6	9.6	77.3	42.2	2.51	.016	.74
Fs	61.7	23.2	90.8	39.2	3.06	.004	.90
FBS-r	54.2	21.0	64.6	28.0	1.42	.164	.42

Notes: Cohen's *d* calculated for effect size. F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

Table 3. Frequencies in the Head Injury Simulation sample

T-score	F-r			Fp-r			Fs			FBS-r		
	% HIC	% ORG	LR	% HIC	% ORG	LR	% HIC	% ORG	LR	% HIC	% ORG	LR
120	0	26.1			13.0		0	17.4				
110	4.3	43.5	10.1		17.4		4.3	26.1	6.1			
100	4.3	43.5	10.1		21.7		4.3	43.5	10.1	0	0	
90	8.7	43.5	5.0		21.7		17.4	56.5	3.2	8.7	26.1	3.0
80	26.1	56.5	2.2	0	43.5		21.7	60.9	2.8	17.4	43.5	2.5
70	47.8	60.9	1.3	4.3	43.5	10.1	30.4	69.6	2.3	17.4	47.8	2.7
60	56.5	73.9	1.3	13.0	60.9	4.7	39.1	69.6	1.8	39.1	60.9	1.6
50	78.3	73.9	0.9	73.9	73.9	1.0	60.9	73.9	1.2	60.9	69.6	1.1
40	100	100	1.0	100	100	1.0	100	100	1.0	65.2	73.9	1.1
30										100	100	1.0

Notes: Cumulative percentages in descending order. HIC = Head Injury Controls; ORG = Over-Reporting Group; LR = Likelihood ratios; F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

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Table 4. Comparison between over-reporting participants ($n = 32$) and medical controls ($n = 44$) in Medical Simulation sample

	Medical Controls		Medical Simulation Group		$t(74)$	p-value	d-value
	Mean T-score	SD	Mean T-score	SD			
F-r	58.2	13.6	115.7	40.7	8.75	<.001	2.03
Fp-r	49.0	12.2	105.9	48.7	7.45	<.001	1.73
Fs	57.3	12.2	109.9	38.7	8.48	<.001	1.97
FBS-r	53.4	12.5	84.6	14.8	9.95	<.001	2.31

Notes: Cohen's d calculated for effect size. F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

Table 5. Frequencies in Medical Simulation sample

T-score	F-r			Fp-r			Fs			FBS-r		
	% MC	% ORG	LR	% MC	% ORG	LR	% MC	% ORG	LR	% MC	% ORG	LR
120		46.9		0	25.0			37.5				
110		56.3		2.3	37.5	16.3		46.9			0	
100	0	62.5		2.3	43.8	19.0	0	56.3			21.9	
90	4.5	65.6	14.6	2.3	53.1	23.1	2.3	68.8	29.9	0	40.6	
80	9.1	75.0	8.2	2.3	62.5	27.2	6.8	75.0	11.0	4.5	65.6	14.6
70	20.5	87.5	4.3	4.5	71.9	16.0	11.4	75.0	6.6	9.1	87.5	9.6
60	43.2	90.6	2.1	6.8	81.3	12.0	22.7	84.4	3.7	34.1	96.9	2.8
50	65.9	100	1.5	43.2	100	2.3	81.8	100	1.2	50.0	100	2.0
40	100		1.0	100		1.0	100		1.0	86.4		1.2
30										100		1.0

Notes: Cumulative percentages in descending order. MC = Medical Controls; ORG = Over-Reporting Group; LR = Likelihood ratios; F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

Table 6. MMPI-2-RF validity scales and SVT performance in the Personal Injury/Disability sample

	Passed SVT ($n = 93$)		Failed 1 SVT ($n = 21$)		Failed 2–3 SVT ($n = 26$)		ANOVA		Effect size	
	M	SD	M	SD	M	SD	$F(2, 139)$	p-value	η^2	d-value
F-r	62.5_a	16.7	82.6_b	24.2	92.7_b	25.2	28.1	<.001	.29	1.60
Fp-r	50.1_a	9.3	60.3_b	20.4	62.7_b	13.9	13.8	<.001	.17	1.21
Fs	57.2_a	15.6	75.7_b	21.0	81.4_b	23.4	22.9	<.001	.25	1.38
FBS-r	67.5_a	14.7	87.6_b	13.8	87.1_b	9.6	32.5	<.001	.32	1.42

Notes: Means with different subtext are significantly different (Tukey's HSD). Cohen's d calculated for effect size between passed SVT group and failed 2–3 SVT group. SVT = symptom validity test; MMPI-2-RF = Minnesota Multiphasic Personality Inventory-2 Restructured Form; F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

Table 7. Frequencies in Personal Injury/Disability sample

T-score	F-r			Fp-r			Fs			FBS-r		
	% Pass	% Fail	LR	% Pass	% Fail	LR	% Pass	% Fail	LR	% Pass	% Fail	LR
120		19.2						7.7				
110	0	30.8					0	7.7		0	0	
100	3.2	34.6	10.8		0		1.1	15.4	14.0	2.2	3.8	1.7
90	7.5	38.5	5.1	0	3.8		5.4	34.6	6.4	5.4	38.5	7.1
80	17.2	61.5	3.6	1.1	15.4	14.0	8.6	61.5	7.2	25.8	73.1	2.8
70	32.3	73.1	2.3	2.2	23.1	10.5	21.5	65.4	3.0	41.9	96.2	2.3
60	50.5	100	2.0	9.7	38.5	4.0	35.5	73.1	2.1	66.7	100	1.5
50	76.3		1.3	53.8	92.3	1.7	67.7	100	1.5	90.3		1.1
40	100		1.0	100	100	1.0	100		1.0	96.8		1.0
30										100		1.0

Notes: Cumulative percentages in descending order. PASS = Passed all SVT ($n = 93$); FAIL = Failed 2–3 SVT ($n = 26$); LR = Likelihood ratios; F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity.

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Validity of the MMPI-2-RF (Restructured Form) L–r and K–r Scales in Detecting Underreporting in Clinical and Nonclinical Samples

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In the current investigation, the authors examined the validity of the L–r and K–r scales on the recently developed Minnesota Multiphasic Personality Inventory–2–Restructured Form (MMPI-2-RF; Y. S. Ben-Porath & A. Tellegen, in press) in measuring underreported response bias. Three archival samples previously collected for examining MMPI-2 validity scales were reanalyzed in 2 studies. In Study 1 L–r and K–r significantly differentiated 2 groups of participants (patients with schizophrenia and university students) who had been instructed to underreport on the MMPI-2 from participants who took the test under standard instructions. L–r and K–r also added incremental predictive variance to one another in differentiating these groups. In Study 2 a similar set of outcomes emerged through the use of a differential prevalence design in which L–r and K–r significantly differentiated a group of child custody litigants who were administered the MMPI-2 from university students taking the test under standard instructions.

Table 1
Underreporting Versus Standard Instructions in Patient and Undergraduate Samples

	Patients		Undergraduates					
Scale	SI (n = 43)	UI (n = 44)	SI (n = 46)	UI (n = 48)	F	d_1	d_2	d_3
L–r	51.67_a (10.78)	63.66_b (14.75)	49.71_a (9.57)	57.92_b (15.11)	10.88^{***}	0.93	0.65	1.13
K–r	46.60_a (8.79)	57.81_b (9.97)	46.54_a (9.68)	59.42_b (8.23)	26.35^{***}	1.19	1.44	1.15

Note. Means with different subscripts are significantly different at $p < .05$. Values in parentheses represent standard deviations. SI = standard instructions; UI = underreporting instructions; d_1 = schizophrenia patients SI vs. UI; d_2 = undergraduate SI vs. UI; d_3 = undergraduate SI vs. schizophrenia UI.
$^{***}p < .001$.

Table 3
Underreporting Versus Standard Instructions in Undergraduate and Custody Differential Prevalence Samples

	Undergraduates		Custody			
Scale	SI (n = 67)	UI (n = 65)	DPG (n = 109)	F	d_1	d_2
L–r	49.60_a (9.81)	64.57_b (17.68)	59.69_b (12.11)	22.09^{***}	1.05	0.89
K–r	47.70_a (11.66)	58.77_b (9.87)	56.12_b (10.66)	20.60^{***}	1.02	0.76

Note. Means with different subscripts are significantly different at $p < .05$. Values in parentheses represent standard deviations. SI = standard instructions; UI = underreporting instructions; DPG = differential prevalence group; d_1 = effect size for undergraduates SI vs. UI; d_2 = effect size for undergraduate SI vs. custody DPG.
$^{***}p < .001$.

Malingering

INTERPRETING THE MMPI 2 RF

Malingering

- Cannot be determined by self-report alone
  - External incentive?
  - Factitious disorder?
- When integrated with other sources
  - Collateral information
  - PVTs
  - Other testing
  - Interview
- MMPI-2-RF indications of over-reporting can support the evaluator's conclusions about malingering
- MMPI-2-RF over-reporting indicators have been validated primarily in the context of identifying malingering

Malingering

- Malingering and psychopathology are not mutually exclusive
  - i.e., malingering is not an indication of the absence of psychopathology
- Regardless of malingering, MMPI-2-RF findings of significant over-reporting
  - Raise questions about the validity of scores on the substantive scales
  - And therefore indicate that scores on the substantive scales cannot be relied upon to assess for psychological dysfunction
  - Raise general questions about the validity of the test-taker's self-reported symptoms

CHAPTER 5: ADMINISTRATION AND SCORING

Administering and Scoring the MMPI-2-RF

- Standard Procedures delineated in *Manual for Administration, Scoring, and Interpretation*
- Administration:
  - Before Testing
    - Consider age
    - Inquire about prior testing experience
    - Assess Testability
      - Cognitive wherewithal
      - Vision
      - Reading Level
  - Use Standard Administration Modalities
    - Booklet and answer sheet
    - Computer

INTERPRETING THE MMPI 2 RF

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Normative Sample:
    - MMPI-2 Normative Sample Collected in mid-1980s
    - Non-gendered norms (1,138 men, 1,138 women)

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Ethnic Origins of Participants in the Non-Gendered Sample Compared to 1990 Census Data

Ethnic Group	Frequency	%	Census %
Asian	13	0.6	2.6
Black	264	11.6	10.2
Hispanic	67	2.9	7.3
Native American	71	3.1	0.6
White	1,861	81.8	76.2
Other	0	0.0	3.2
Total	2,276	100.1	100.1

Age Distribution of Participants in the Non-Gendered Sample Compared to 1990 Census Data

Age Range	Frequency	%	Census %
18–19	46	2.0	4.3
20–29	549	24.1	22.2
30–39	679	29.8	23.0
40–49	356	15.6	17.4
50–59	280	12.3	12.0
60–69	239	10.5	11.4
70–79	109	4.8	7.7
80–85	18	0.8	2.2
Total	2,276	99.9	100.2

Education of Participants in the Non-Gendered Sample Compared to 1990 Census Data

Education	Frequency	%	Census %
Less than high school graduate	113	5.0	17.9
High school graduate	552	24.3	33.4
Some college	568	25.0	26.4
College graduate	614	27.0	15.3
Post-graduate	429	18.8	7.0
Total	2,276	100.1	100.0

INTERPRETING THE MMPI 2 RF

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Normative Sample:
    - MMPI-2 Normative Sample Collected in 1980s
    - Non-gendered norms (1,138 men, 1,138 women)
    - Norms appear to be holding up well (Technical Manual Appendix C)

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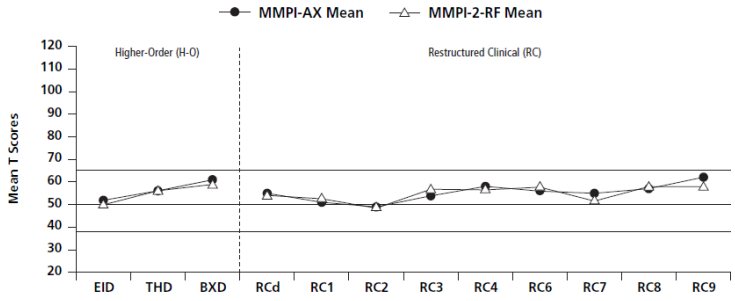
MMPI-AX/MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales Means and Standard Deviations: Normative Comparability—Men

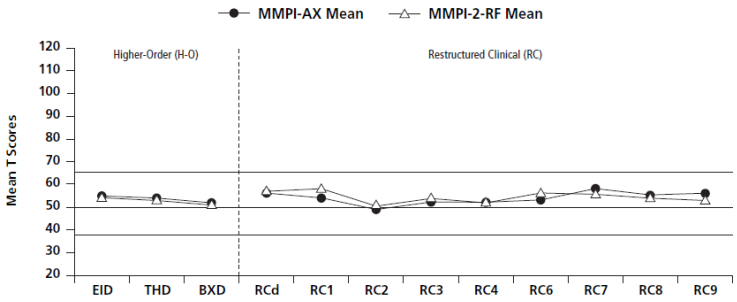


MMPI-AX Mean	52	56	61	55	51	49	54	58	56	55	57	62
SD	10	9	10	10	10	10	8	11	11	10	11	12
MMPI-2-RF Mean	50	56	59	54	53	49	57	57	58	52	58	58
SD	11	10	10	9	10	13	9	11	11	9	10	11

Note. MMPI-AX *N* = 103. MMPI-2-RF *N* = 89.

INTERPRETING THE MMPI 2 RF

MMPI-AX/MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales Means and Standard Deviations: Normative Comparability—Women



MMPI-AX Mean	55	54	52	56	54	49	52	52	53	58	55	56
SD	10	10	9	10	11	9	9	9	11	11	11	10
MMPI-2-RF Mean	54	53	51	57	58	51	54	52	56	56	54	53
SD	10	9	9	10	10	10	10	9	10	11	10	10

Note. MMPI-AX *N* = 458. MMPI-2-RF *N* = 140.

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Normative Sample:
    - MMPI-2 Normative Sample Collected in 1980s
    - Non-gendered norms (1,138 men, 1,138 women)
    - Norms appear to be holding up well (Technical Manual Appendix C)
    - Uniform T scores

INTERPRETING THE MMPI 2 RF

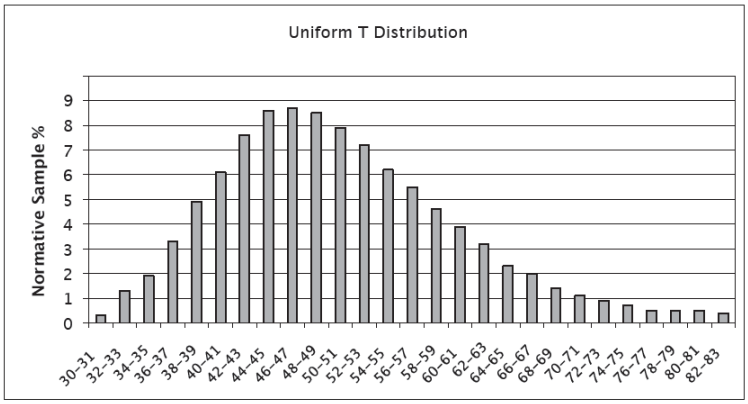


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Table 5-1. Percentile Equivalents of Uniform T Scores

Uniform T Score	Equivalent Percentile
30	< 1
35	4
40	15
45	34
50	55
55	73
60	85
65	92
70	96
75	98
80	> 99

INTERPRETING THE MMPI 2 RF

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Normative Sample:
    - MMPI-2 Normative Sample Collected in 1980s
    - Non-gendered norms (1,138 men, 1,138 women)
    - Norms appear to be holding up well (Technical Manual Appendix C)
    - Uniform T scores
  - Comparison Groups
    - Technical Manual Appendix D

MMPI-2-RF: Standard Comparison Groups

- MMPI-2-RF Normative (Men & Women)
- Outpatient, Community Mental Health Center (Men & Women)
- Outpatient, Independent Practice (Men & Women)
- Psychiatric Inpatient, Community Hospital (Men & Women)
- Psychiatric Inpatient, VA Hospital (Men)
- Substance Abuse Treatment, VA (Men)
- Bariatric Surgery Candidate (Men & Women)
- Spine Surgery/Spinal Cord Stimulator Candidates (Men & Women)
- Chronic Pain (Men & Women)
- College Counseling Clinic (Men & Women)
- College Student (Men & Women)
- Forensic, Disability Claimant (Men & Women)
- Forensic, Independent Neuropsychological Examination (Men & Women)
- Forensic, Pre-trial Criminal (Men & Women)
- Forensic, Child Custody (Men & Women)
- Forensic, Parental Fitness Evaluees (Men & Women)
- Prison Inmate (Men & Women)
- Personnel Screening, Law Enforcement (Men, Women & Combined)
- Personnel Screening, Corrections Officer (Men, Women & Combined)
- Personnel Screening, Clergy Candidates (Men, Women, & Combined)

INTERPRETING THE MMPI 2 RF

Table D-1.

Comparison Group T-Score Means and Standard Deviations

	MMPI-2-RF Normative		Outpatients, Community Mental Health Center		Outpatients, Independent Practice	
Scale	M (*n* = 1,138)	W (*n* = 1,138)	M (*n* = 370)	W (*n* = 582)	M (*n* = 246)	W (*n* = 432)
VRIN-r	50 (11)	50 (9)	51 (10)	52 (10)	50 (9)	51 (9)
TRIN-r	50 (11)	51T (10)	51T (10)	51T (9)	50 (9)	50 (9)
F-r	50 (10)	50 (10)	72 (24)	75 (23)	56 (17)	62 (20)
Fp-r	51 (10)	49 (10)	58 (14)	58 (14)	50 (10)	54 (12)
Fs	50 (10)	50 (10)	62 (18)	68 (21)	52 (13)	58 (18)
FBS-r	48 (9)	52 (10)	60 (15)	70 (15)	56 (13)	67 (14)
RBS	50 (10)	50 (10)	62 (18)	67 (19)	54 (14)	59 (16)
L-r	50 (10)	50 (10)	52 (11)	53 (11)	51 (11)	50 (9)
K-r	50 (10)	50 (10)	43 (11)	41 (10)	50 (11)	46 (10)
EID	49 (10)	51 (10)	64 (15)	68 (14)	54 (13)	62 (14)
THD	50 (10)	50 (10)	57 (15)	59 (13)	50 (11)	52 (12)
BXD	53 (10)	47 (9)	60 (12)	54 (11)	53 (11)	47 (9)
RCd	49 (9)	51 (10)	64 (14)	68 (13)	55 (13)	63 (13)
RC1	49 (9)	51 (10)	61 (15)	67 (15)	52 (13)	61 (14)
RC2	50 (10)	50 (10)	62 (16)	65 (15)	54 (12)	59 (14)
RC3	51 (10)	49 (10)	56 (11)	57 (12)	49 (11)	50 (10)
RC4	52 (10)	48 (9)	62 (13)	59 (11)	54 (11)	52 (9)
RC6	51 (10)	49 (10)	62 (15)	62 (15)	54 (12)	54 (13)
RC7	48 (9)	52 (10)	56 (13)	62 (13)	50 (11)	57 (13)
RC8	50 (10)	50 (10)	57 (13)	57 (13)	49 (10)	51 (12)
RC9	51 (11)	49 (9)	53 (11)	50 (10)	48 (10)	46 (9)

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Administering and Scoring the MMPI-2-RF

- Scoring:
  - Standard Scoring Modalities:
    - Hand scoring
    - Computer
      - Score Report

MMPI-2-RF®

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

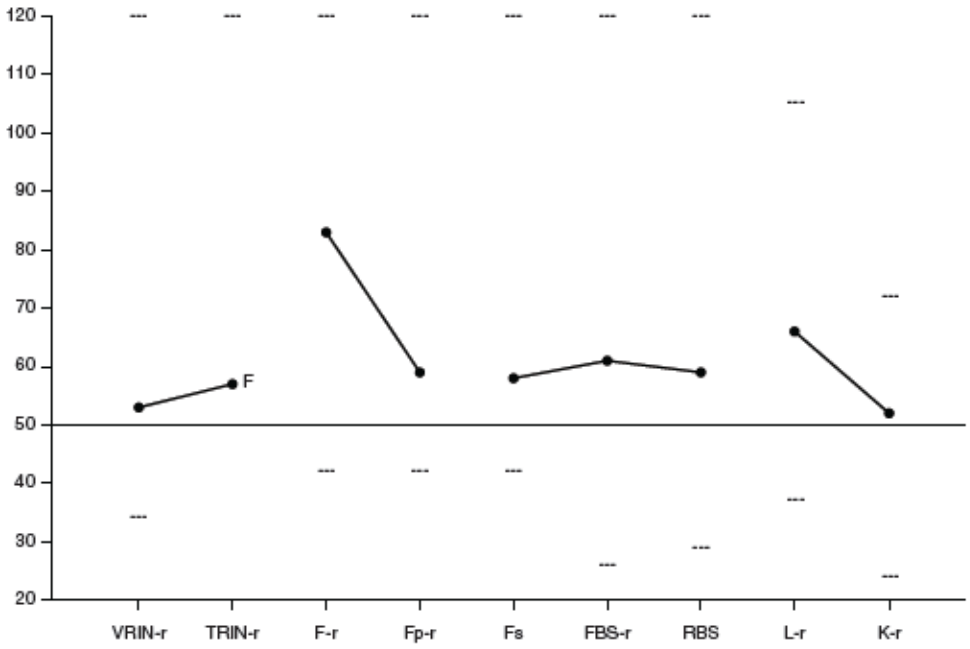
Name:	Mr. P
ID Number:	Fig902
Age:	49
Gender:	Male
Marital Status:	Never Married
Years of Education:	11
Date Assessed:	04/22/2011

PsychCorp

[2.1 / 1 / 2.8.6]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



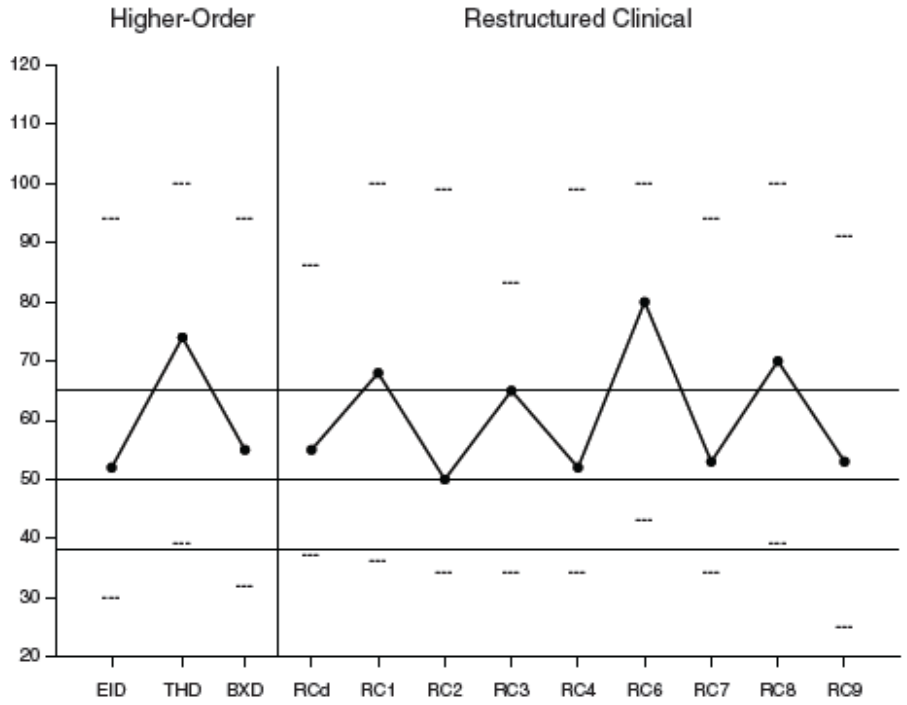
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	11	8	8	7	10	4	11	5	6	8	7	14
T Score:	52	74	55	55	68	50	65	52	80	53	70	53
Response %:	98	100	100	96	100	100	100	100	100	100	100	100

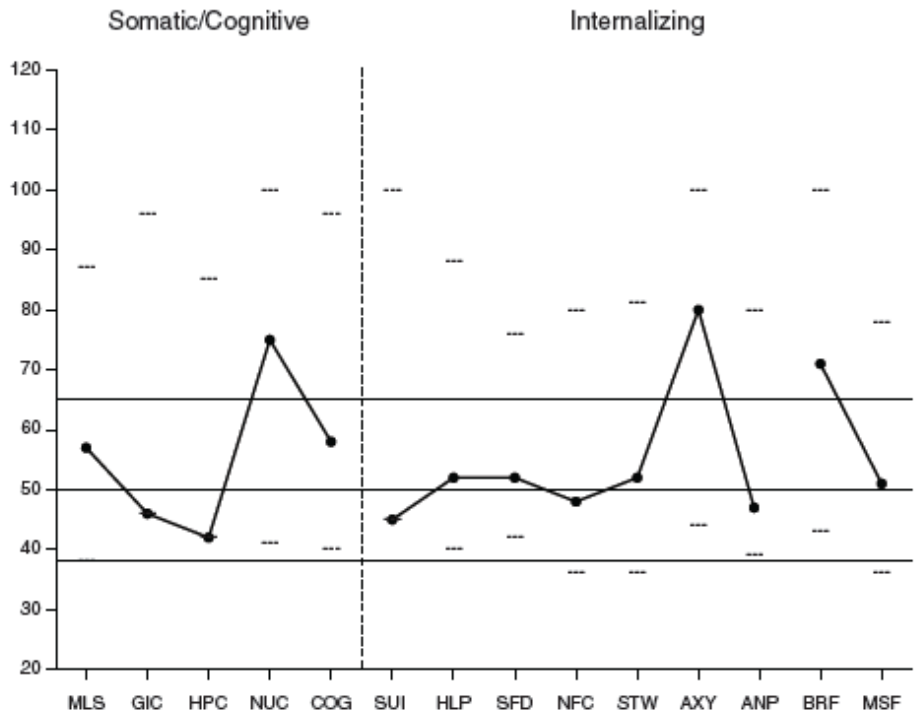
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales

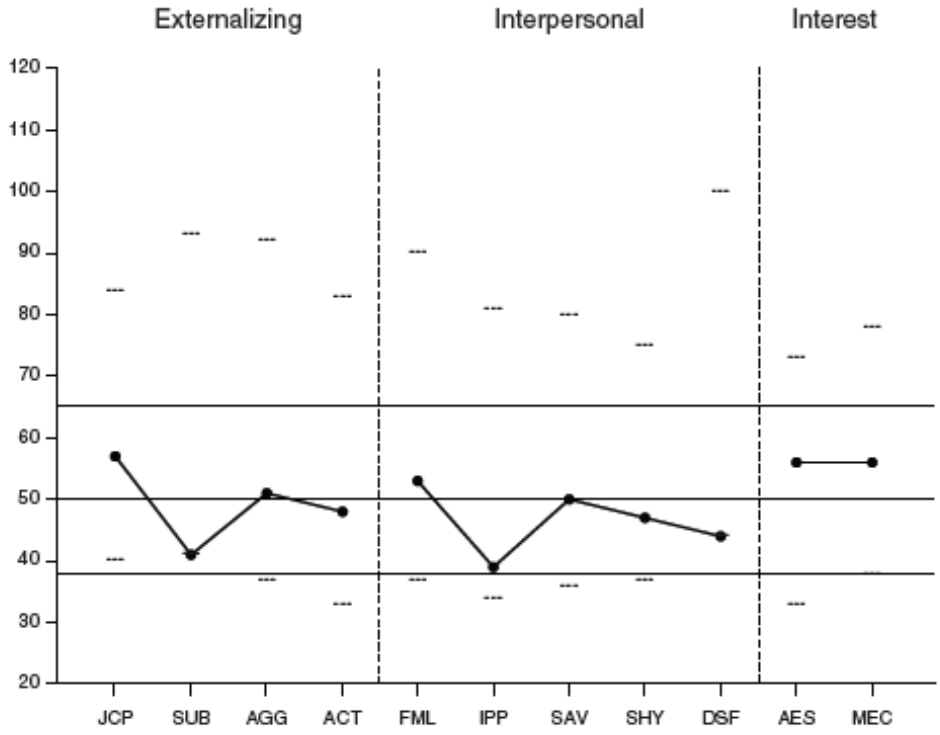


	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	3	0	0	5	3	0	1	1	2	3	3	1	3	4
T Score:	57	46	42	75	58	45	52	52	48	52	80	47	71	51
Response %:	100	100	100	100	100	100	100	100	100	100	100	100	100	89

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales

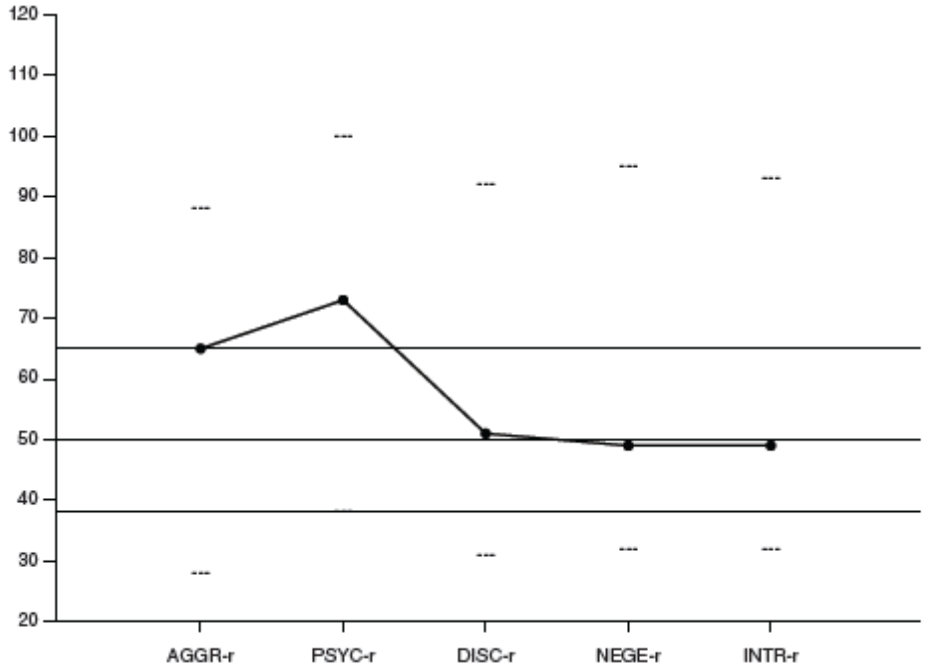


	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	2	0	2	3	3	1	3	2	0	4	4
T Score:	57	41	51	48	53	39	50	47	44	56	56
Response %:	100	100	100	100	100	100	100	100	100	100	100

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	13	8	7	6	6
T Score:	65	73	51	49	49
Response %:	100	100	100	100	100

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness		2 CNS	53 VRIN-r	57 F TRIN-r				
Over-Reporting		83 F-r	59 Fp-r		58 Fs	61 FBS-r	59 RBS	
Under-Reporting		66 L-r	52 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction		68 RC1	57 MLS	46 GIC	42 HPC	75 NUC	58 COG	
Emotional Dysfunction	52 EID	55 RCd	45 SUI	52 HLP	52 SFD	48 NFC		
		50 RC2	49 INTR-r					
		53 RC7	52 STW	80 AXY	47 ANP	71 BRF	51* MSF	49 NEGE-r
Thought Dysfunction	74 THD	80 RC6						
		70 RC8						
		73 PSYC-r						
Behavioral Dysfunction	55 BXD	52 RC4	57 JCP	41 SUB				
		53 RC9	51 AGG	48 ACT	65 AGGR-r	51 DISC-r		
Interpersonal Functioning		53 FML	65 RC3	39 IPP	50 SAV	47 SHY	44 DSF	
Interests		56 AES	56 MEC					

*The test taker provided scorable responses to less than 90% of the items scored on this scale. See the relevant profile page for the specific percentage.

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

Following is a list of items to which the test taker 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.

172.

184.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample that answered each item in the keyed direction is provided in parentheses following the item content.

Anxiety (AXY, T Score = 80)

79.
275.
289.

Ideas of Persecution (RC6, T Score = 80)

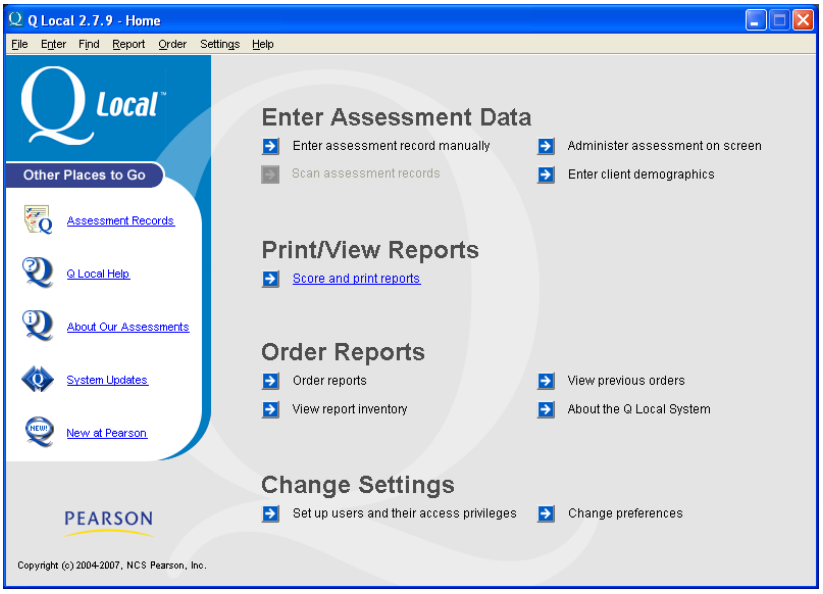
150.
194.
212.
233.
264.
310.

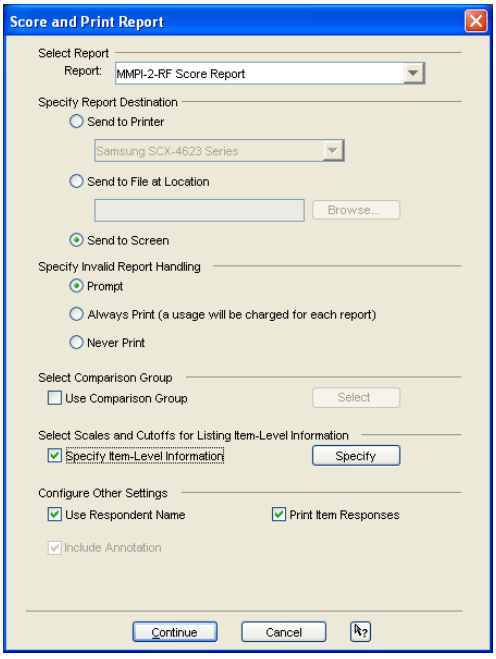
Aberrant Experiences (RC8, T Score = 70)

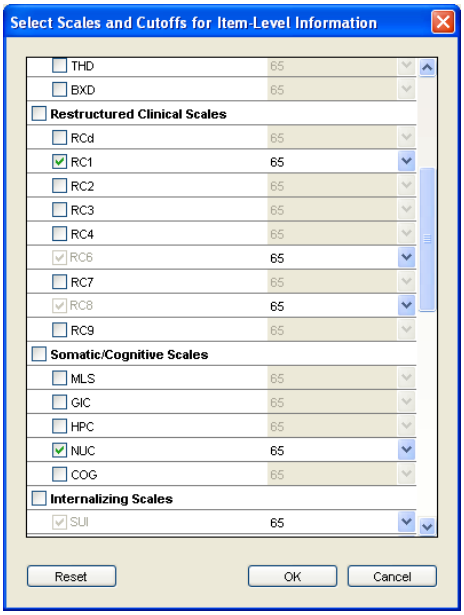
32.
85.
179.
199.
216.
240.
330.

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

End of Report







INTERPRETING THE MMPI 2 RF

User-Designated Item-Level Information

The following item-level information is based on the report user's selection of additional scales, and/or of lower cutoffs for the critical scales from the previous section. Items answered by the test taker in the keyed direction (True or False) on a selected scale are listed below if his T score on that scale is at the user-designated cutoff score or higher. The percentage of the MMPI-2-RF normative sample that answered each item in the keyed direction is provided in parentheses following the item content.

Somatic Complaints (RC1, T Score = 68)

28.
69.
113.
162.
174.
227.
242.
254.
290.
313.

ITEMS NOT SHOWN

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Neurological Complaints (NUC, T Score = 75)

69.
113.
162.
227.
313.

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.

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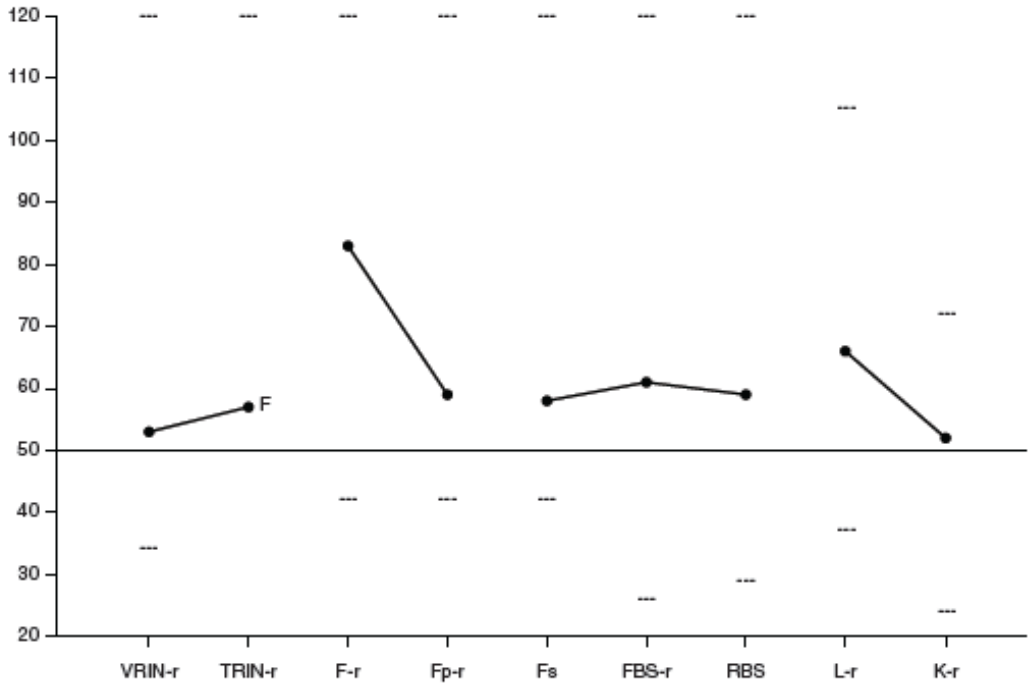
Administering and Scoring the MMPI-2-RF

- Scoring:
  - Standard Scoring Modalities:
    - Hand scoring
    - Computer
      - Score Report
        - » Comparison Groups (Standard and Custom)

MMPI-2-RF Validity Scales



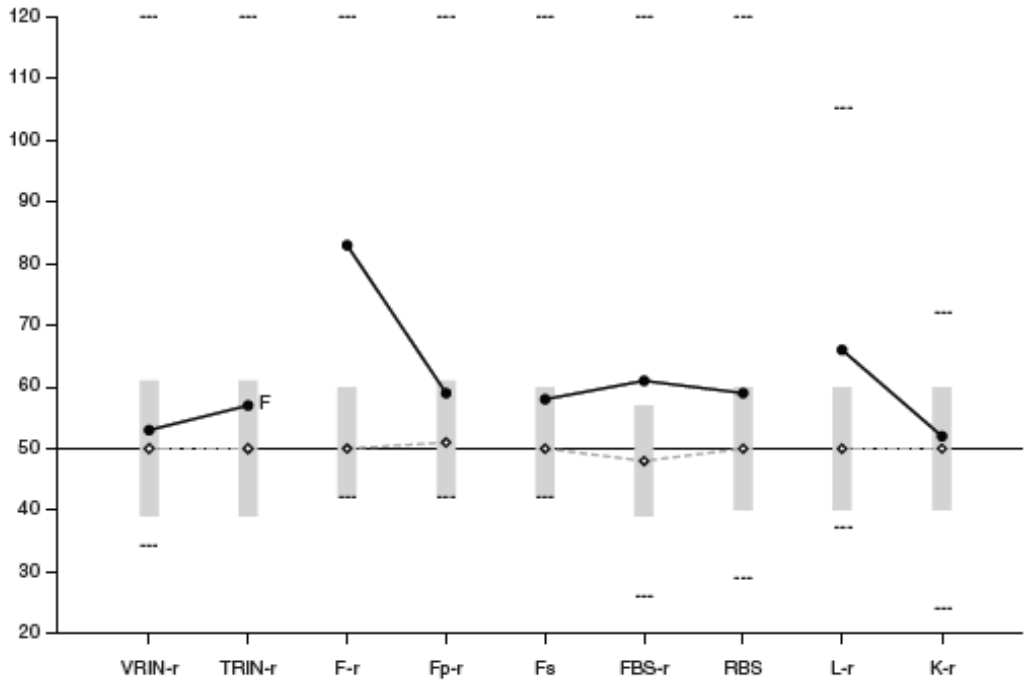
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

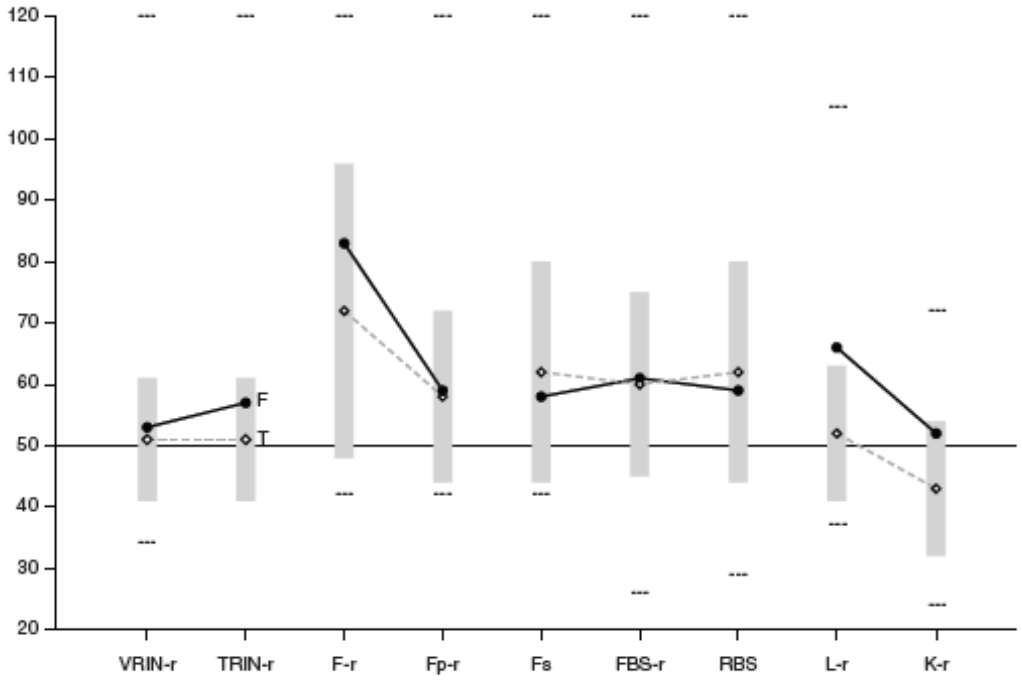
Comparison Group Data: MMPI-2-RF Normative (Men), N = 1138

Mean Score (◇---◇):	50	50	50	51	50	48	50	50	50
Standard Dev (±1 SD):	11	11	10	10	10	9	10	10	10
Percent scoring at or below test taker:	75	80	99	89	89	93	86	95	61

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

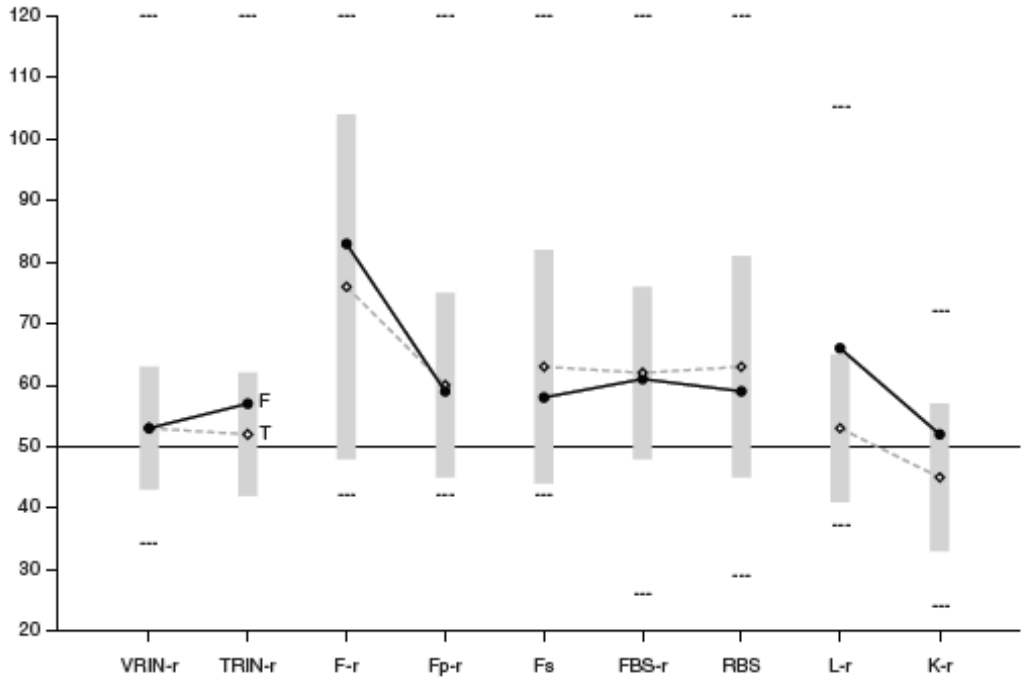
Comparison Group Data: Outpatient, Community Mental Health Center (Men), N = 370

Mean Score (◇---◇):	51	51 T	72	58	62	60	62	52	43
Standard Dev (±1 SD):	10	10	24	14	18	15	18	11	11
Percent scoring at or below test taker:	71	76	74	70	60	59	55	91	82

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r Variable Response Inconsistency
TRIN-r True Response Inconsistency
F-r Infrequent Responses
Fp-r Infrequent Psychopathology Responses
Fs Infrequent Somatic Responses
FBS-r Symptom Validity
RBS Response Bias Scale
L-r Uncommon Virtues
K-r Adjustment Validity

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

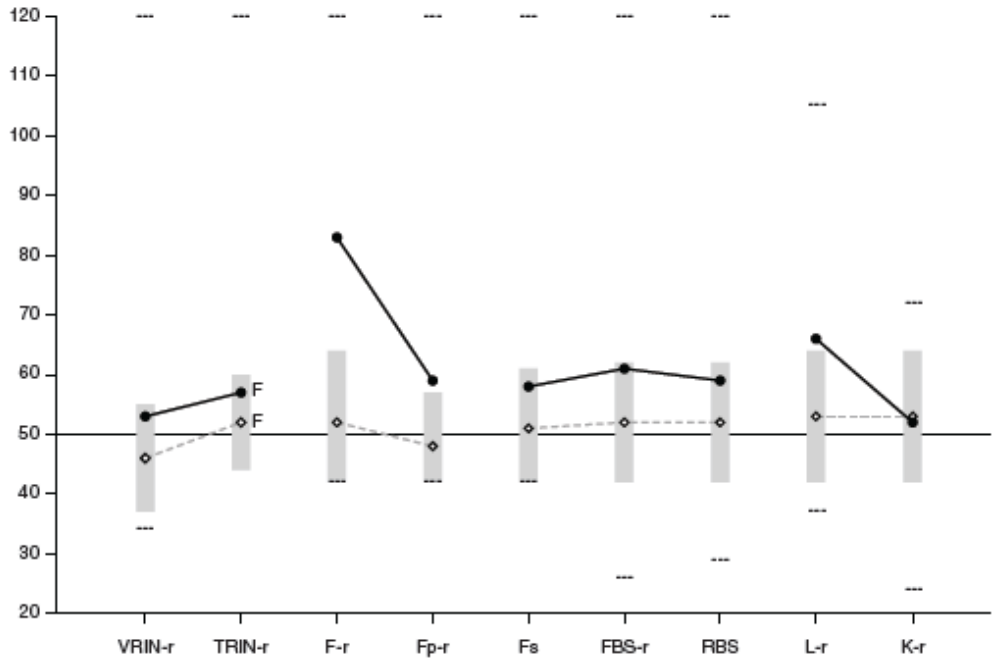
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Mean Score (◇---◇):	53	52 T	76	60	63	62	63	53	45
Standard Dev (±1 SD):	10	10	28	15	19	14	18	12	12
Percent scoring at or below test taker:	63	76	67	64	58	55	51	88	75

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

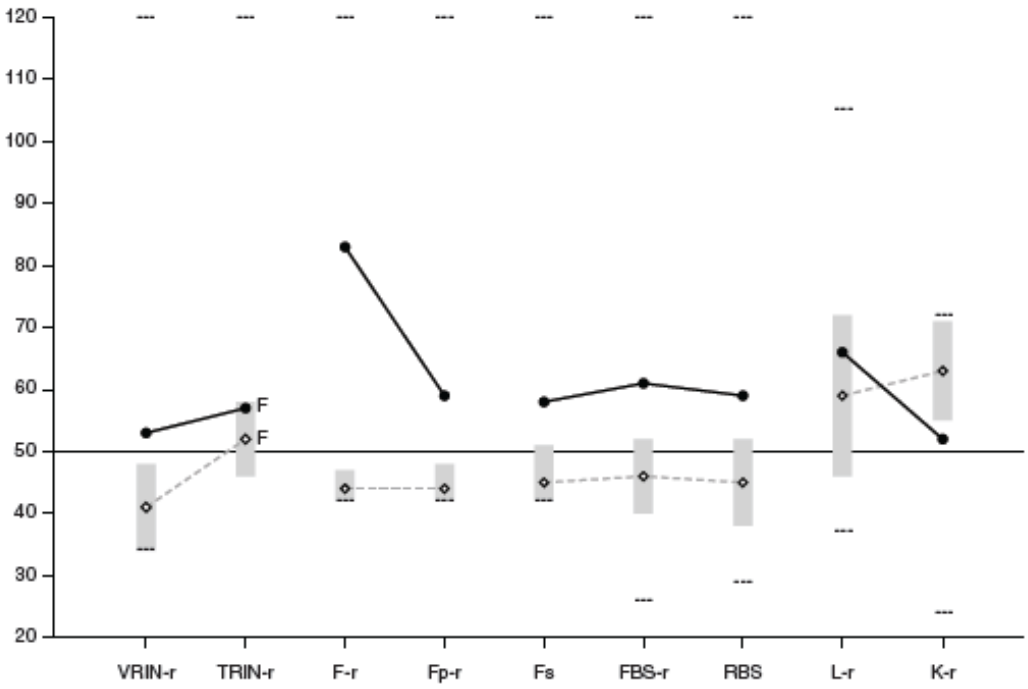
Comparison Group Data: Bariatric Surgery Candidate (Men), N = 228

	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Mean Score (◇---◇):	46	52 F	52	48	51	52	52	53	53
Standard Dev (±1 SD):	9	8	12	9	10	10	10	11	11
Percent scoring at or below test taker:	84	80	97	93	89	88	86	90	43

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

Comparison Group Data: Personnel Screening, Law Enforcement Officer (Men and Women), N = 674

	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Mean Score (◇---◇):	41	52 F	44	44	45	46	45	59	63
Standard Dev (±1 SD):	7	6	3	4	6	6	7	13	8
Percent scoring at or below test taker:	97	91	100	99.1	98	99.7	99	78	12

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

Comparison Group Generator

INTERPRETING THE MMPI 2 RF

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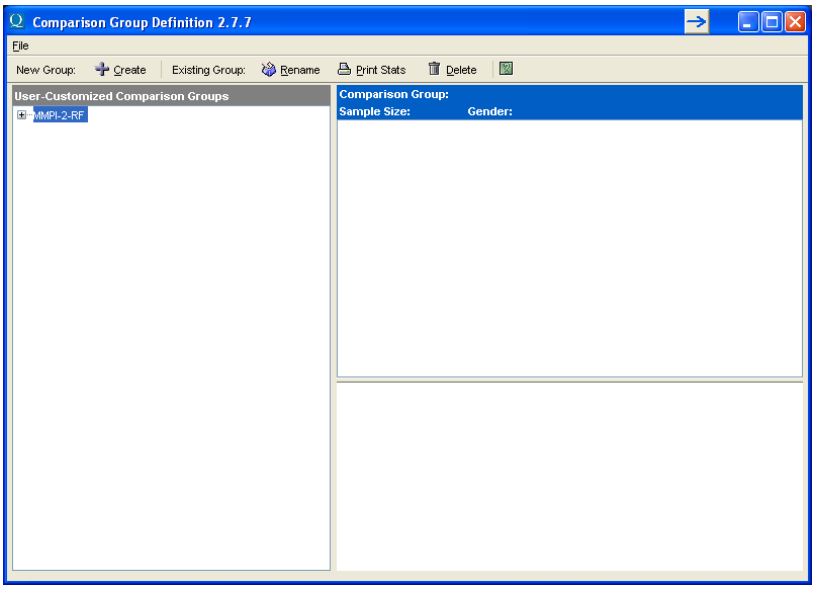
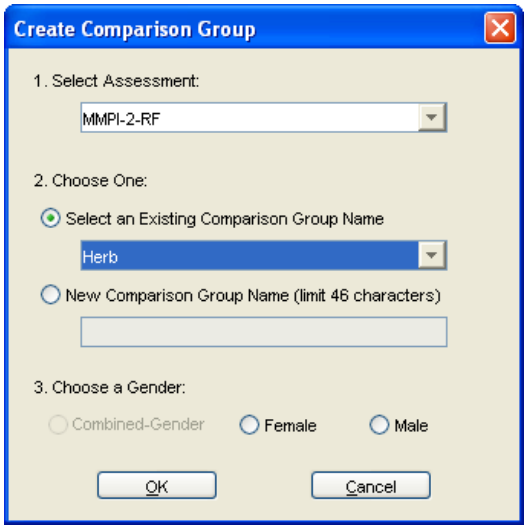
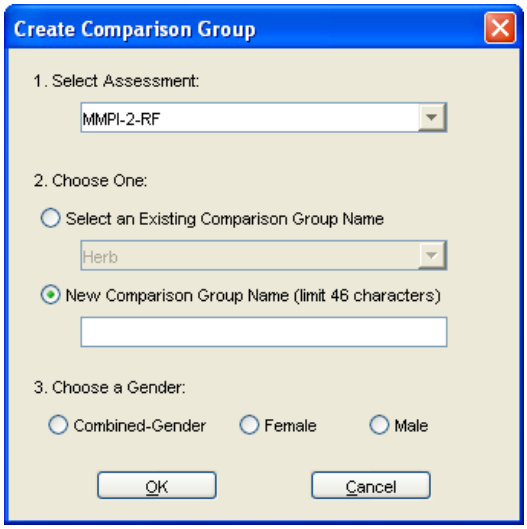
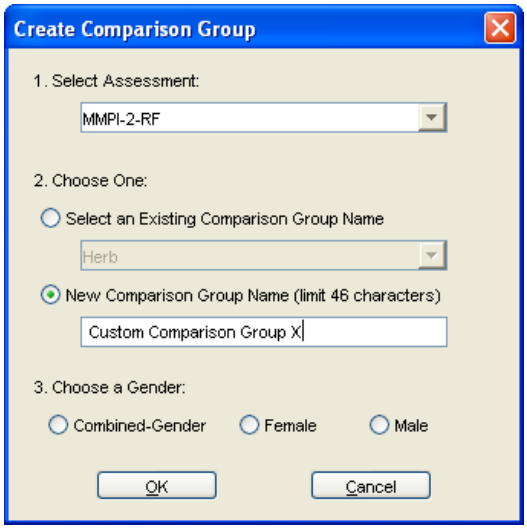


INTERPRETING THE MMPI-2-RF





INTERPRETING THE MMPI 2 RF



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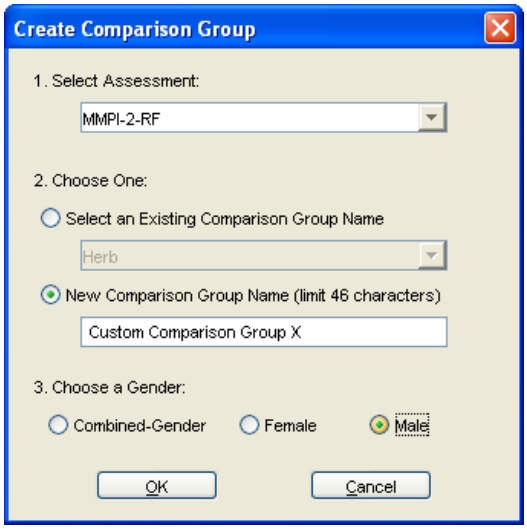
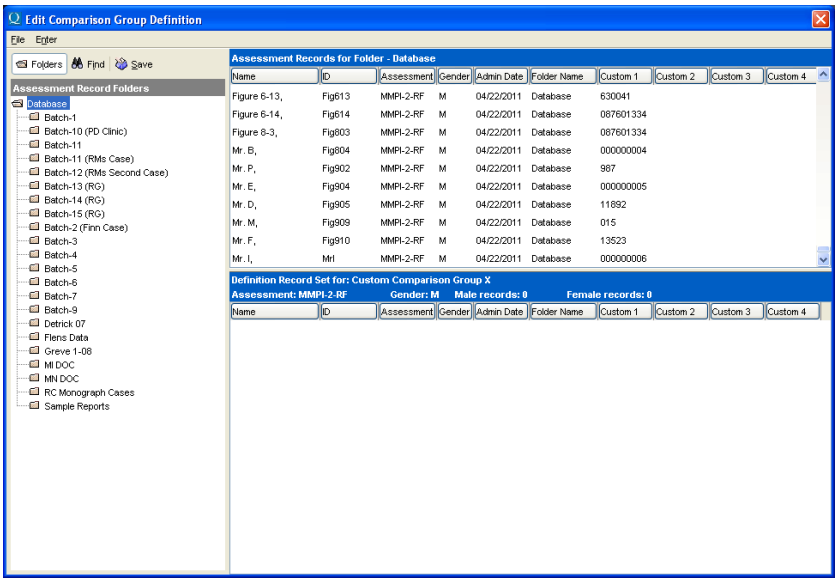
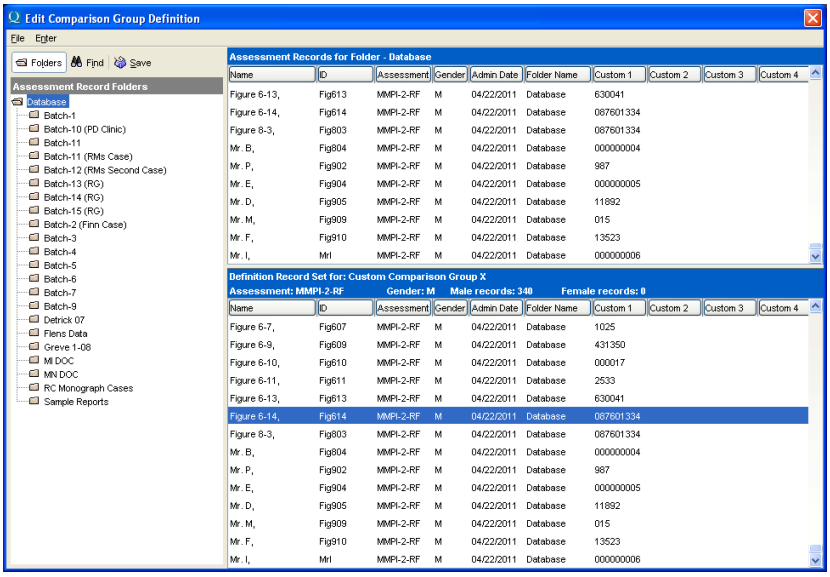
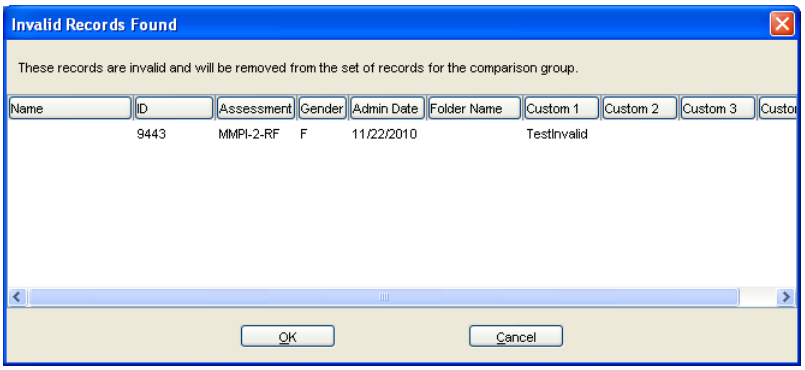


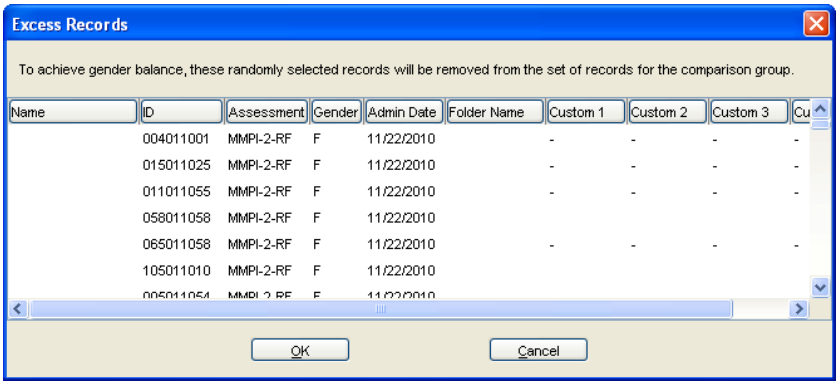
INTERPRETING THE MMPI-2-RF

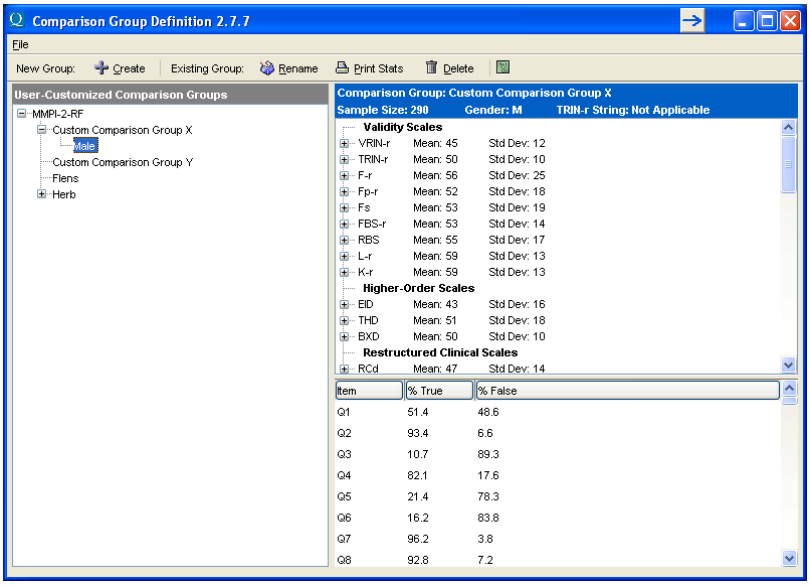




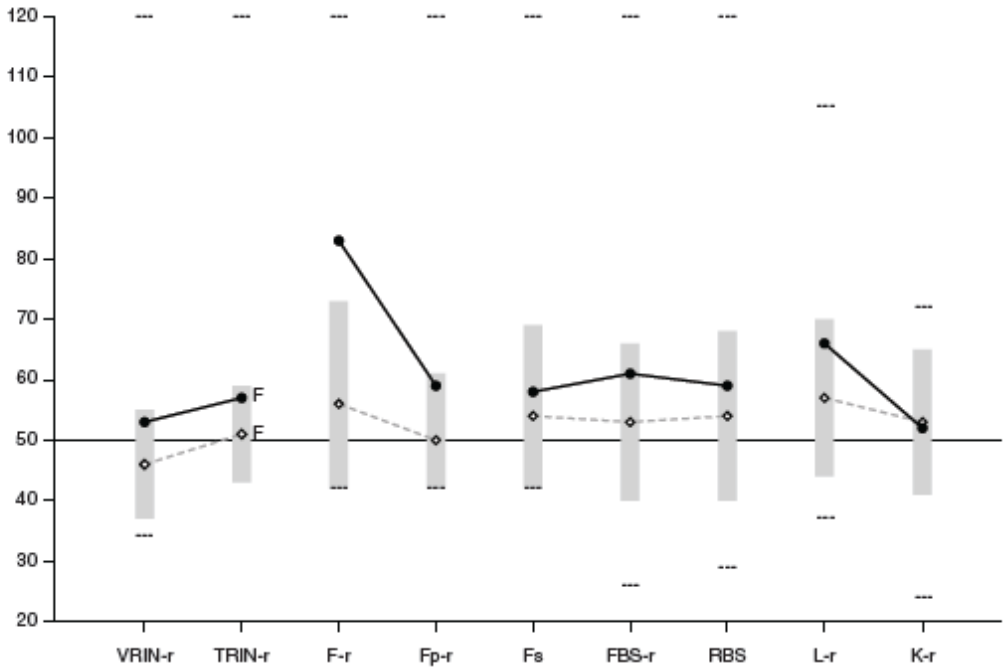


INTERPRETING THE MMPI 2 RF





MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42 %

Comparison Group Data: Custom Comparison Group X (Men), N = 632*

Mean Score (◇--◇):	46	51 F	56	50	54	53	54	57	53
Standard Dev (±1 SD):	9	8	17	11	15	13	14	13	12
Percent scoring at or below test taker:	86	84	92	89	81	81	78	83	46

*User-defined comparison group.
The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r Variable Response Inconsistency
TRIN-r True Response Inconsistency
F-r Infrequent Responses
Fp-r Infrequent Psychopathology Responses
Fs Infrequent Somatic Responses
FBS-r Symptom Validity
RBS Response Bias Scale
L-r Uncommon Virtues
K-r Adjustment Validity

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Standard Scoring Modalities:
    - Hand scoring
    - Computer
      - Score Report
        - » Comparison Groups
      - Interpretive Report

This interpretive report is intended for use by a professional qualified to interpret the MMPI-2-RF. The information it contains should be considered in the context of the test taker's background, the circumstances of the assessment, and other available information.

SYNOPSIS

Scores on the MMPI-2-RF validity scales raise concerns about the possible impact of unscorable responses, over-reporting, and under-reporting on the validity of this protocol. With that caution noted, scores on the substantive scales indicate somatic complaints and emotional, thought, and interpersonal dysfunction. Somatic complaints include preoccupation with poor health and neurological symptoms. Emotional-internalizing findings include anxiety and fears. Dysfunctional thinking includes ideas of persecution and aberrant perceptions and thoughts. Interpersonal difficulties relate to cynicism.

PROTOCOL VALIDITY

Content Non-Responsiveness

Unscorable Responses

The test taker 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[1]. A list of all items for which the test taker provided unscorable responses appears under the heading "Item-Level Information."

Multiple Specific Fears (MSF): 89%

Inconsistent Responding

The test taker responded to the items in a consistent manner, indicating that he responded relevantly.

Over-Reporting

The test taker generated a larger than average number of infrequent responses to the MMPI-2-RF items. This level of infrequent responding may occur in individuals with genuine psychological difficulties who report credible symptoms. However, for individuals with no history or current corroborating evidence of dysfunction it likely indicates over-reporting[2].

Under-Reporting

There is also evidence of possible under-reporting in this protocol. The test taker presented himself in a positive light by denying some minor faults and shortcomings that most people acknowledge. This level of virtuous self-presentation may reflect a background stressing traditional values. 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[3].

SUBSTANTIVE SCALE INTERPRETATION

Clinical symptoms, personality characteristics, and behavioral tendencies of the test taker 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-2-RF scales, whereas statements that include the word "likely" are based on empirical correlates of scale scores. Specific sources for each statement can be viewed with the annotation features of this report.

The following interpretation needs to be considered in light of cautions noted about the possible impact of unscorable responses, over-reporting, and under-reporting on the validity of this protocol.

Somatic/Cognitive Dysfunction

The test taker reports multiple somatic complaints[4] including vague neurological complaints[5]. He is likely to complain of fatigue[6]. He is also likely to be preoccupied with physical health concerns[7] and to be prone to developing physical symptoms in response to stress[8].

Emotional Dysfunction

The test taker reports feeling anxious[9] and is likely to experience significant anxiety and anxiety-related problems[10], intrusive ideation, and nightmares[11]. He also reports multiple fears that significantly restrict normal activity in and outside the home[12].

Thought Dysfunction

The test taker's responses indicate significant and pervasive thought dysfunction[13]. More specifically, he reports prominent persecutory ideation that likely rises to the level of paranoid delusions, including a strong belief that others seek to harm him[14]. He is very likely to be suspicious and distrustful[15], to experience serious interpersonal difficulties as a result of pervasive interpersonal suspiciousness[16], and to lack insight[16].

He reports unusual thought processes[17]. He is likely to engage in unrealistic thinking[18] and to believe he has unusual sensory-perceptual abilities[19]. His aberrant experiences may include somatic delusions[20].

Behavioral Dysfunction

There are no indications of maladaptive externalizing behavior in this protocol. However, because of indications of under-reporting described earlier, such problems cannot be ruled out.

Interpersonal Functioning Scales

The test taker reports having cynical beliefs, distrust of others, and believing others look out only for their own interests[21]. He is likely to be hostile toward others[22] and feel alienated from them[23], and to have negative interpersonal experiences as a result of his cynical beliefs[24].

Interest Scales

The test taker reports an average number of interests in activities or occupations of an aesthetic or literary nature (e.g., writing, music, the theater)[25]. He also reports an average number of interests in activities or occupations of a mechanical or physical nature (e.g., fixing and building things, the

SUBSTANTIVE SCALE INTERPRETATION

Clinical symptoms, personality characteristics, and behavioral tendencies of the test taker 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-2-RF scales, whereas statements that include the word "likely" are based on empirical correlates of scale scores. Specific sources for each statement can be viewed with the annotation features of this report.

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Emotional Dysfunction

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outdoors, sports)[26].

DIAGNOSTIC CONSIDERATIONS

This section provides recommendations for psychodiagnostic assessment based on the test taker's MMPI-2-RF results. It is recommended that he be evaluated for the following:

Emotional-Internalizing Disorders

- Somatoform disorder[27] and/or conditions involving somatic delusions, if physical origin for neurological complaints has been ruled out[28]
- Anxiety-related disorders including PTSD[29]
- Agoraphobia and specific phobias[30]

Thought Disorders

- Disorders involving paranoid delusional thinking[31]
- Disorders manifesting psychotic symptoms[32]
- Personality disorders manifesting unusual thoughts and perceptions[33]

Interpersonal Disorders

- Personality disorders involving mistrust of and hostility toward others[34]

TREATMENT CONSIDERATIONS

This section provides inferential treatment-related recommendations based on the test taker's MMPI-2-RF scores.

Areas for Further Evaluation

- May require inpatient treatment due to paranoid delusional thinking [35].
- Need for antipsychotic[36] and anxiolytic[37] medications.
- Extent to which genuine physical health problems contribute to the scores on the Somatic Complaints (RC1) and Neurological Complaints (NUC) scales[20].

Psychotherapy Process Issues

- Likely to reject psychological interpretations of somatic complaints[20].
- Extreme persecutory ideation may interfere with forming a therapeutic relationship and treatment compliance[35].
- Impaired thinking may disrupt treatment[38].
- Cynicism may interfere with forming a therapeutic relationship[34].

Possible Targets for Treatment

- Anxiety[37]
- Behavior-restricting fears[30]
- Prominent persecutory ideation[35]
- Lack of interpersonal trust[34]

ITEM-LEVEL INFORMATION

Unscorable Responses

Following is a list of items to which the test taker 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.

172.

184.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample that answered each item in the keyed direction is provided in parentheses following the item content.

Anxiety (AXY, T Score = 80)

79.
275.
289.

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Ideas of Persecution (RC6, T Score = 80)

150.
194.
212.
233.
264.
310.

Aberrant Experiences (RC8, T Score = 70)

32.
85.
179.

ENDNOTES

This section lists for each statement in the report the MMPI-2-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.) For correlate-based statements, research references (Ref. No.) are provided, keyed to the consecutively numbered reference list following the endnotes.

[1] Correlate: Response % < 90, Ref. 5
[2] Correlate: F-r=83, Ref. 4, 10, 15, 16, 18, 25, 30
[3] Correlate: L-r=66, Ref. 17
[4] Test Response: RC1=68
[5] Test Response: NUC=75
[6] Correlate: RC1=68, Ref. 3, 27
[7] Correlate: RC1=68, Ref. 4, 6, 8, 9, 11, 22, 23, 27, 28; NUC=75, Ref. 4, 27
[8] Correlate: RC1=68, Ref. 9, 27; NUC=75, Ref. 27
[9] Test Response: AXY=80
[10] Correlate: AXY=80, Ref. 24
[11] Correlate: AXY=80, Ref. 27
[12] Test Response: BRF=71
[13] Correlate: THD=74, Ref. 27; PSYC-r=73, Ref. 27
[14] Test Response: RC6=80
[15] Correlate: RC6=80, Ref. 2, 4, 11, 20, 23, 27
[16] Correlate: RC6=80, Ref. 27
[17] Test Response: RC8=70; PSYC-r=73
[18] Correlate: RC8=70, Ref. 4, 6, 7, 9, 27; PSYC-r=73, Ref. 27
[19] Correlate: RC8=70, Ref. 6, 7, 9, 26, 27; PSYC-r=73, Ref. 27
[20] Inference: RC1=68; NUC=75
[21] Test Response: RC3=65
[22] Correlate: RC3=65, Ref. 8, 12, 21, 27
[23] Correlate: RC3=65, Ref. 12, 20, 27; RC6=80, Ref. 2, 11, 20, 23, 27
[24] Correlate: RC3=65, Ref. 6, 27
[25] Test Response: AES=56
[26] Test Response: MEC=56
[27] Correlate: RC1=68, Ref. 13, 14, 29
[28] Inference: RC8=70; NUC=75
[29] Correlate: AXY=80, Ref. 1, 24, 27
[30] Inference: BRF=71
[31] Correlate: RC6=80, Ref. 19
[32] Correlate: RC8=70, Ref. 27
[33] Inference: RC8=70; PSYC-r=73
[34] Inference: RC3=65
[35] Inference: RC6=80
[36] Correlate: RC6=80, Ref. 27; PSYC-r=73, Ref. 27

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End of Report

Administering and Scoring the MMPI-2-RF

- Scoring:
  - Standard Scoring Modalities:
    - Hand scoring
    - Computer
      - Score Report
        - » Comparison Groups
      - Interpretive Report
        - » Comparison Groups (Do not alter interpretation)

CHAPTERS 6-8:

- INTERPRETING THE MMPI-2-RF VALIDITY SCALES
- INTERPRETING THE MMPI-2-RF SUBSTANTIVE SCALES
- INTERPRETING THE MMPI-2-RF: RECOMMENDED FRAMEWORK AND PROCESS

MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales

INTERPRETING THE MMPI 2 RF

Table 6-2. VRIN-r (Variable Response Inconsistency) Interpretation

T Score	Protocol Validity Concerns	Possible Reasons for Score	Interpretive Implications
≥ 80	The protocol is invalid because of excessive variable response inconsistency.	Reading or language limitations Cognitive impairment Errors in recording responses Intentional random responding An uncooperative test-taking approach	The protocol is uninterpretable.
70–79	There is some evidence of variable response inconsistency.	Reading or language limitations Cognitive impairment Errors in recording responses Carelessness	Scores on the Validity and substantive scales should be interpreted with some caution.
39–69	There is evidence of consistent responding.	The test-taker was able to comprehend and respond relevantly to the test items.	The protocol is interpretable.
30–38	There is evidence of remarkably consistent responding.	The test-taker was deliberate in his or her approach to the assessment.	The protocol is interpretable.

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MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales
  - Chapter 7 - Substantive Scales

Table 7-5. RC1 (Somatic Complaints) Interpretation

Clinical Symptoms, Behavioral Tendencies, and Personality Characteristics
Test Responses
T score < 39
Reports a sense of well-being
T score 65–79
Reports multiple somatic complaints that may include head pain, neurological, and gastrointestinal symptoms
T score ≥ 80
Reports a diffuse pattern of somatic complaints involving different bodily systems that probably include head pain and neurological and gastrointestinal symptoms
Empirical Correlates
Is preoccupied with physical health concerns
Is prone to developing physical symptoms in response to stress
Has a psychological component to his or her somatic complaints
Complains of fatigue
Presents with multiple somatic complaints
Diagnostic Considerations
Evaluate for somatoform disorder (consider a conversion disorder if RC3 ≤ 39 and SHY ≤ 39)
Treatment Considerations
Is likely to reject psychological interpretations of somatic complaints

MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales
  - Chapter 7 - Substantive Scales
- Framework and Process for MMPI-2-RF Interpretation (Chapter 8)
  - Framework and Sources

INTERPRETING THE MMPI 2 RF

Table 8-1. Recommended Framework and Sources of Information for MMPI-2-RF Interpretation

Domains	MMPI-2-RF sources
I. Protocol validity	
a. Content nonresponsiveness	CNS, VRIN-r, TRIN-r
b. Overreporting	F-r, Fp-r, Fs, FBS-r, RBS
c. Underreporting	L-r, K-r
II. Substantive scale findings	
a. Somatic/cognitive dysfunction	RC1, MLS, GIC, HPC, NUC, COG
b. Emotional dysfunction	EID, RCd, RC2, RC7, SUI, HLP, SFD, NFC, STW, AXY, ANP, BRF, MSF, NEGE-r, INTR-r
c. Thought dysfunction	THD, RC6, RC8, PSYC-r
d. Behavioral dysfunction	BXD, RC4, RC9, JCP, SUB, AGG, ACT, AGGR-r, DISC-r
e. Interpersonal functioning	FML, RC3, IPP, SAV, SHY, DSF, INTR-r
f. Interests	AES, MEC
g. Diagnostic considerations	Most substantive scales
h. Treatment recommendations	All substantive scales

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MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales
  - Chapter 7 - Substantive Scales
- Framework and Process for MMPI-2-RF Interpretation (Chapter 8)
  - Framework and Sources
  - Interpretation Worksheet

MMPI-2-RF® Interpretation Worksheet

Protocol Validity

Content Non-Responsiveness CNS ____ VRIN-r ____ TRIN-r ____

Overreporting F-r ____ Fp-r ____ Fs ____ FBS-r ____ RBS ____

Underreporting L-r ____ K-r ____

Figure 8-1. MMPI-2-RF interpretation worksheet.

Substantive Scale Interpretation

Somatic/Cognitive Dysfunction	RC1 ____	GIC ____	NUC ____	
	MLS ____	HPC ____	COG ____	

Emotional Dysfunction	EID ____	RCd ____	RC2 ____	RC7 ____
		SUI ____	INT-r ____	STW ____
		HLP ____		AXY ____
		SFD ____		ANP ____
		NFC ____		BRF ____
				MSF ____
				NEGE-r ____

Figure 8-1. MMPI-2-RF Interpretation worksheet, continued.

Thought Dysfunction THD ____ RC6 ____ RC8 ____ PSYC-r ____

Behavioral Dysfunction BXD ____ RC4 ____ RC9 ____ AGGR-r____
JCP ____ AGG ____ DISC-r ____
SUB ____ ACT ____

Interpersonal Functioning:
FML ____ RC3 ____ IPP ____ SAV ____ SHY ____ DSF ____

Figure 8-1. MMPI-2-RF Interpretation worksheet, continued.

Interests: AES ____ MEC ____

Diagnostic Considerations

Treatment Considerations

Figure 8-1. MMPI-2-RF Interpretation worksheet, continued.

MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales
  - Chapter 7 - Substantive Scales
- Framework and Process for MMPI-2-RF Interpretation (Chapter 8)
  - Framework and Sources
  - Interpretation Worksheet
- Validity Scale Interpretation
  - Threats to Protocol Validity and Confounds

INTERPRETING THE MMPI 2 RF

Table 6-11. MMPI-2-RF Validity Scales: Threats to Protocol Validity and Confounds

Threat	Scale									
	CNS	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Non-Content Based										
Non-responding	×	–	–	–	–	–	–	–	–	–
Random Responding		×		+	+	+	+	+	+	+
Fixed "True" Responding			×	+	+	+	+	+	–	–
Fixed "False" Responding			×	+	+	+	+	+	+	+
Content-Based										
Over-reporting				×	×	×	×	×		
Under-reporting									×	×
Extra-Test Confounds										
Psychopathology				+	+	+	+	+		
Medical Conditions						+	+			
Traditional Upbringing									+	
Good Adjustment										+

Note. × = Scale designed to assesses this threat; + = Confound artifactually increases score; – = Confound artifactually lowers score. Shaded area identifies confounds that can invalidate scores on the corresponding Validity Scales.

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Table 6-4. F-r (Infrequent Responses) Interpretation

T Score	Protocol Validity Concerns	Possible Reasons for Score	Interpretive Implications
120	The protocol is invalid. Over-reporting is reflected in an excessive number of infrequent responses.	Inconsistent responding Over-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of infrequent responding is uncommon even in individuals with genuine, severe psychological difficulties who report credible symptoms. Scores on the substantive scales should not be interpreted.
100–119	The protocol may be invalid. Over-reporting of psychological dysfunction is indicated by a considerably larger than average number of infrequent responses.	Inconsistent responding Severe psychopathology Severe emotional distress Over-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of infrequent responding may occur in individuals with genuine, severe psychological difficulties who report credible symptoms. However, for individuals with no history or current corroborating evidence of dysfunction, it most likely indicates over-reporting.
90–99	Possible over-reporting of psychological dysfunction is indicated by a much larger than average number of infrequent responses.	Inconsistent responding Significant psychopathology Significant emotional distress Over-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of infrequent responding may occur in individuals with genuine, substantial psychological difficulties who report credible symptoms. However, for individuals with no history or current corroborating evidence of dysfunction, it very likely indicates over-reporting.
79–89	Possible over-reporting of psychological dysfunction is indicated by a larger than average number of infrequent responses.	Inconsistent responding Significant psychopathology Significant emotional distress Over-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of infrequent responding may occur in individuals with genuine psychological difficulties who report credible symptoms. However, for individuals with no history or current corroborating evidence of dysfunction, it probably indicates over-reporting.
< 79	There is no evidence of over-reporting.		The protocol is interpretable.

INTERPRETING THE MMPI 2 RF

Table 6-6. Fs (Infrequent Somatic Responses) Interpretation

T Score	Protocol Validity Concerns	Possible Reasons for Score	Interpretive Implications
≥ 100	Scores on the Somatic Scales may be invalid. Over-reporting of somatic symptoms is reflected in the assertion of a considerably larger than average number of somatic symptoms rarely described by individuals with genuine medical problems.	Inconsistent responding Over-reporting of somatic complaints	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of infrequent responding is very uncommon even in individuals with substantial medical problems who report credible symptoms. Scores on the somatic scales should be interpreted in light of this caution.
80–99	Possible over-reporting of somatic symptoms is reflected in the assertion of a much larger than average number of somatic symptoms rarely described by individuals with genuine medical problems.	Inconsistent responding Significant and/or multiple medical conditions Over-reporting of somatic complaints	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level and type of infrequent responding may occur in individuals with substantial medical conditions who report credible symptoms, but it could also reflect exaggeration. In individuals with no history or corroborating evidence of physical health problems, this probably indicates non-credible reporting of somatic symptoms. Scores on the somatic scales should be interpreted in light of this caution.
< 80	There is no evidence of over-reporting.		The protocol is interpretable.

Table 6-9. L-r (Uncommon Virtues) Interpretation

T Score	Protocol Validity Concerns	Possible Reasons for Score	Interpretive Implications
≥ 80	The protocol may be invalid. Under-reporting is indicated by the test-taker presenting himself or herself in an extremely positive light by denying many minor faults and shortcomings that most people acknowledge.	Inconsistent responding Under-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. 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. Elevated scores on the substantive scales may underestimate the problems assessed by those scales.
70–79	Possible under-reporting is indicated by the test-taker presenting himself or herself in a very positive light by denying several minor faults and shortcomings that most people acknowledge.	Inconsistent responding Traditional upbringing Under-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of virtuous self-presentation is uncommon, but may, to some extent, reflect a background stressing traditional values. 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.
65–69	Possible under-reporting is indicated by in the test-taker presenting himself or herself in a positive light by denying some minor faults and shortcomings that most people acknowledge.	Inconsistent responding Traditional upbringing Under-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of virtuous self-presentation may reflect a background stressing traditional values. 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.
< 65	There is no evidence of under-reporting		The protocol is interpretable.

INTERPRETING THE MMPI 2 RF

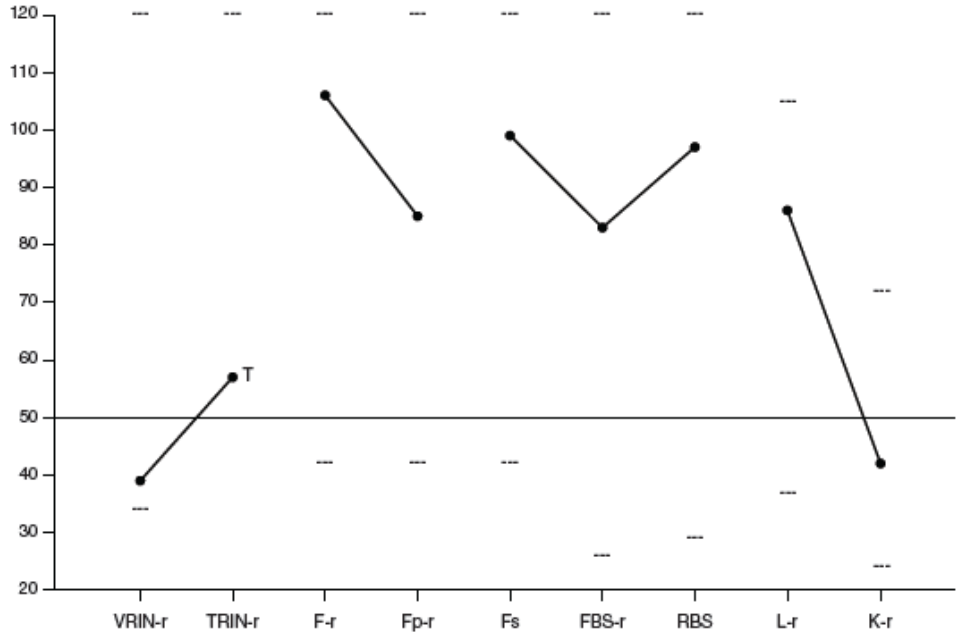
Table 6-10. K-r (Adjustment Validity) Interpretation

T Score	Protocol Validity Concerns	Possible Reasons for Score	Interpretive Implications
≥ 70	Under-reporting is indicated by the test-taker presenting herself or himself as remarkably well adjusted.	Inconsistent responding Under-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of psychological adjustment is rare in the general population. 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.
66–69	Possible under-reporting is reflected in the test-taker presenting himself or herself as very well adjusted.	Inconsistent responding Very good psychological adjustment Under-reporting	Inconsistent responding should be considered by examining the VRIN-r and TRIN-r scores. If it is ruled out, note that this level of psychological adjustment is relatively rare in the general population. For individuals who are not especially well adjusted, 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.
60–65	Possible under-reporting is reflected in the test-taker presenting himself or herself as well adjusted.	Inconsistent responding Good psychological adjustment Under-reporting	Inconsistent responding should be considered by examination of scores on VRIN-r and TRIN-r. In individuals who are not well adjusted, 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.
< 60	There is no evidence of under-reporting		The protocol is interpretable.

MMPI-2-RF Interpretation

- Scale-by-scale interpretive recommendations in:
  - Chapter 6 - Validity Scales
  - Chapter 7 - Substantive Scales
- Framework and Process for MMPI-2-RF Interpretation (Chapter 8)
  - Framework and Sources
  - Interpretation Worksheet
- Validity Scale Interpretation
  - Threats to Protocol Validity and Confounds
  - Examples

MMPI-2-RF Validity Scales



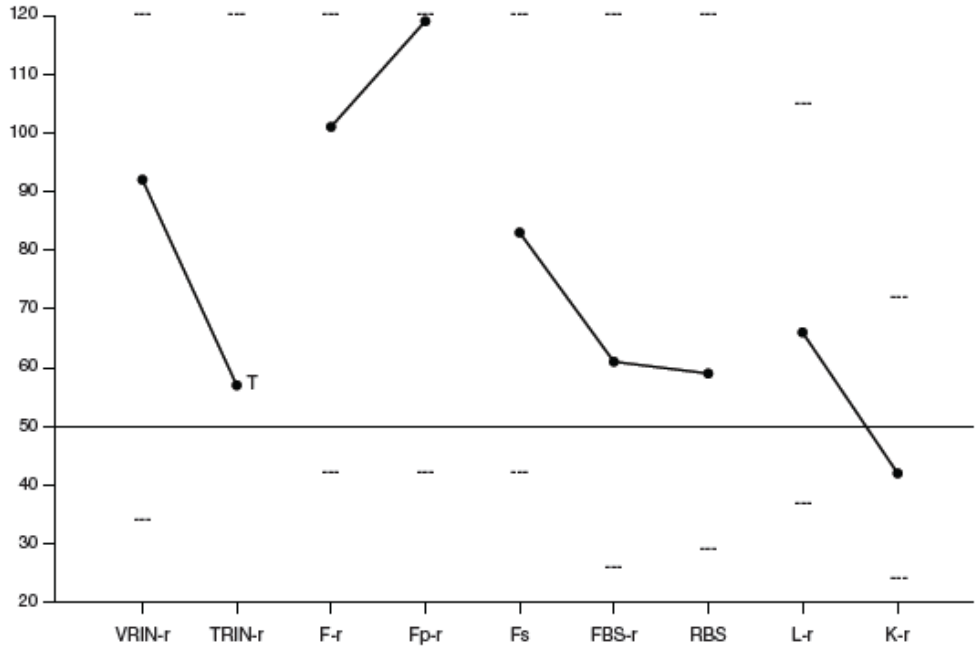
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	1	12	14	5	7	18	16	10	5
T Score:	39	57 T	106	85	99	83	97	86	42
Response %:	**78**	**81**	**78**	**86**	94	**80**	96	**86**	**86**

Cannot Say (Raw): 34 Percent True (of items answered): 39%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



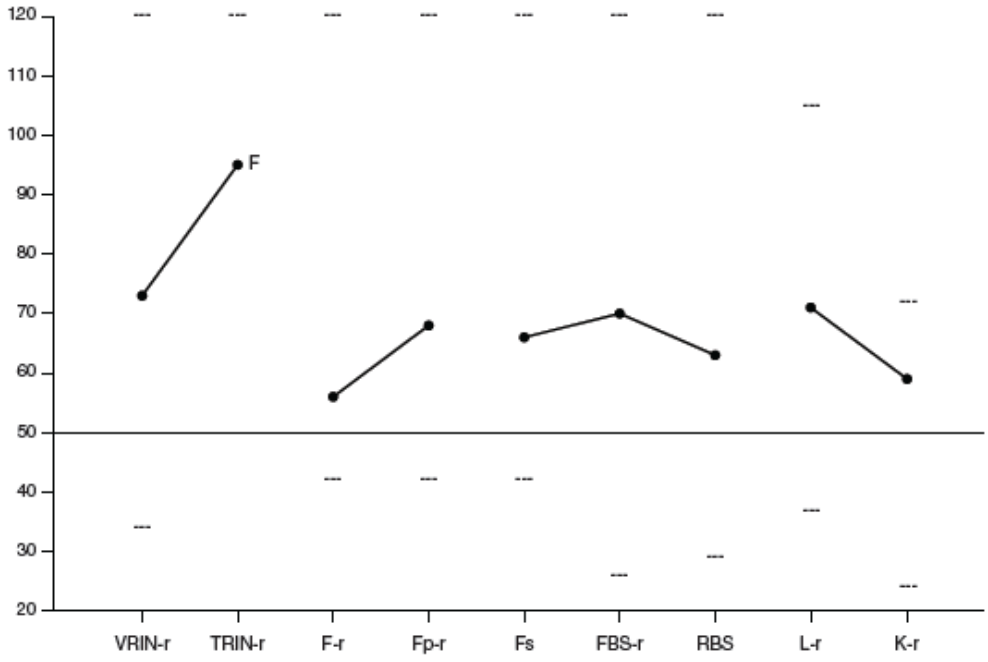
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	12	12	13	9	5	11	7	6	5
T Score:	92	57 T	101	119	83	61	59	66	42
Response %:	98	100	100	95	94	97	100	100	100

Cannot Say (Raw): 8 Percent True (of items answered): 53%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



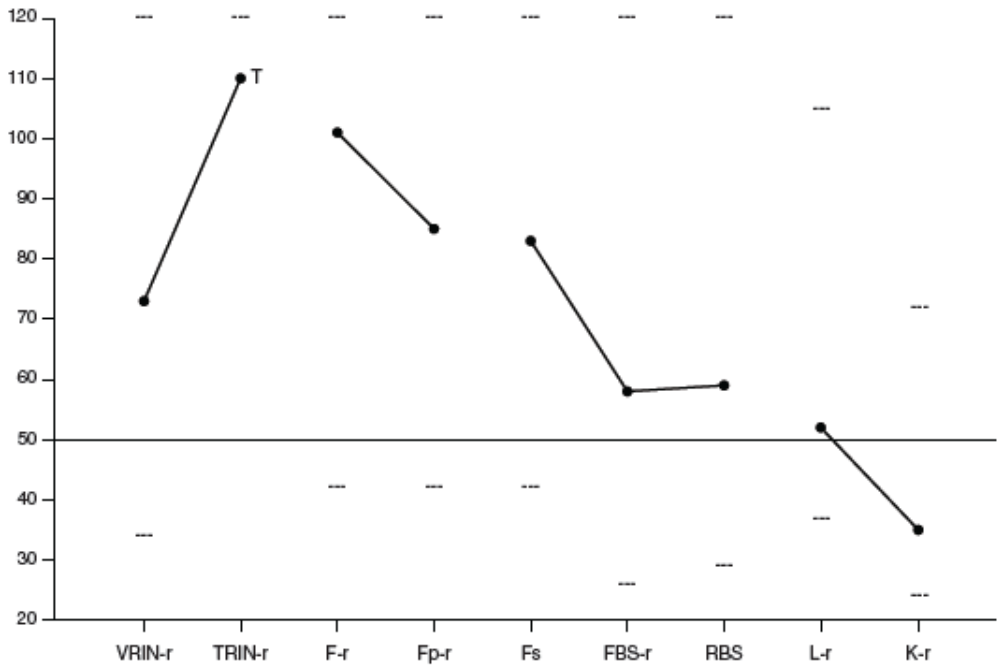
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	8	5	3	3	3	14	8	7	10
T Score:	73	95 F	56	68	66	70	63	71	59
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 21%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



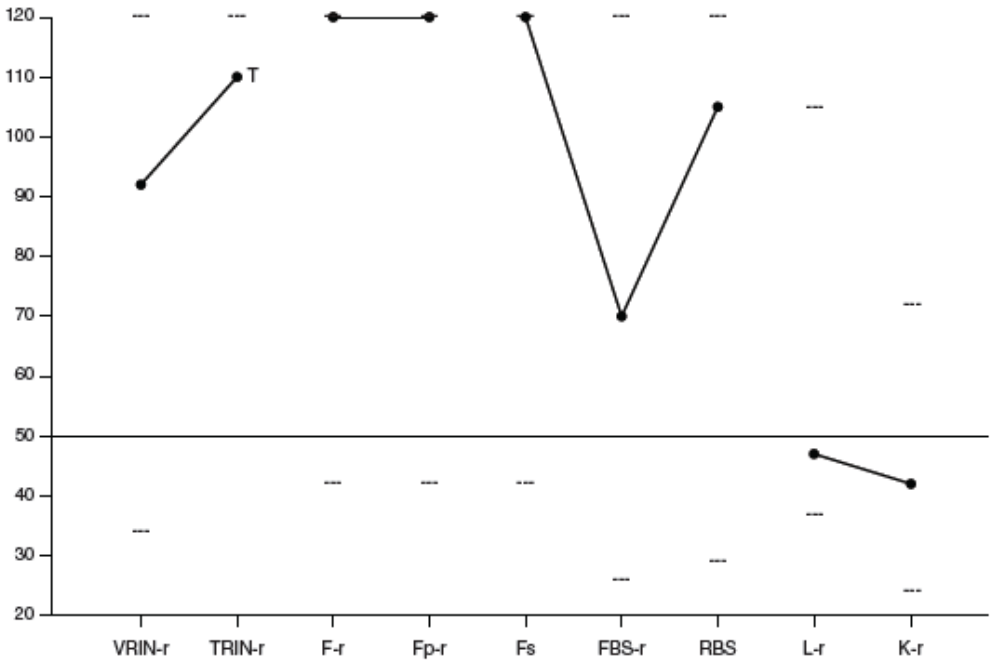
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	8	19	13	5	5	10	7	3	3
T Score:	73	110 T	101	85	83	58	59	52	35
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 64%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



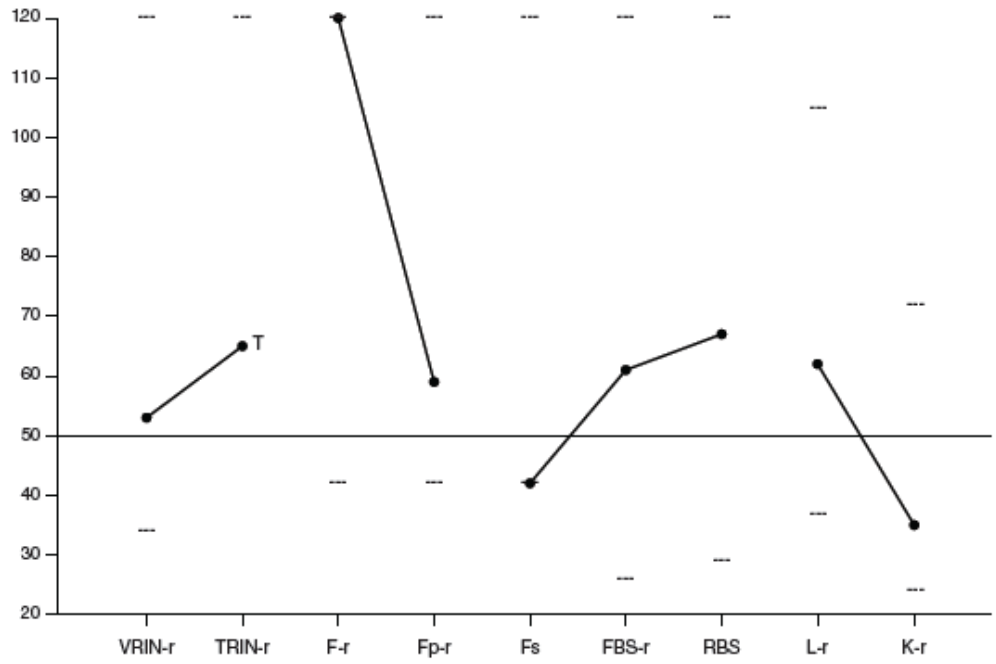
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	12	19	23	13	10	14	18	2	5
T Score:	92	110 T	120	120	120	70	105	47	42
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 72%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	13	17	2	0	11	9	5	3
T Score:	53	65 T	120	59	42	61	67	62	35
Response %:	100	100	100	100	100	100	100	100	100

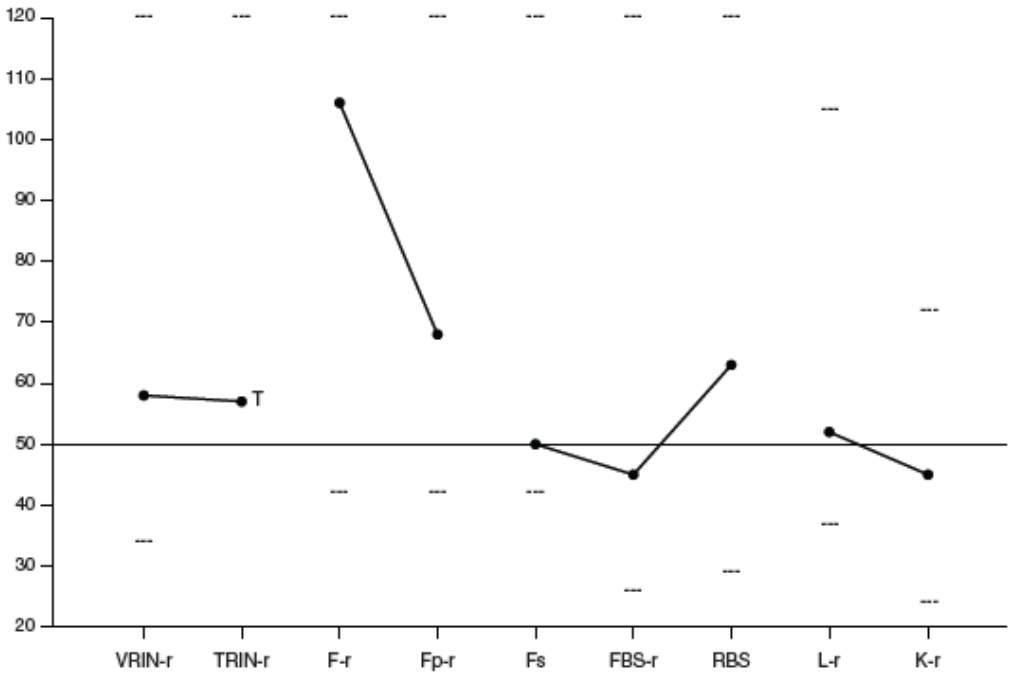
Cannot Say (Raw): 0

Percent True (of items answered): 51%

The highest and lowest T scores possible on each scale are indicated by a "--"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



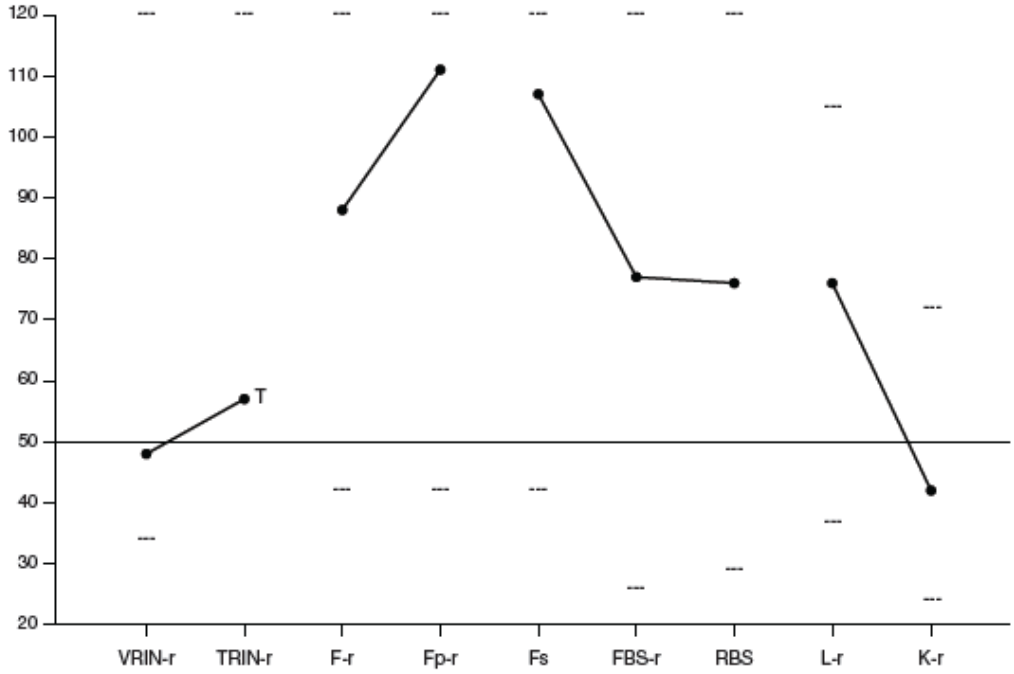
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	5	12	14	3	1	6	8	3	6
T Score:	58	57 T	106	68	50	45	63	52	45
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 43%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



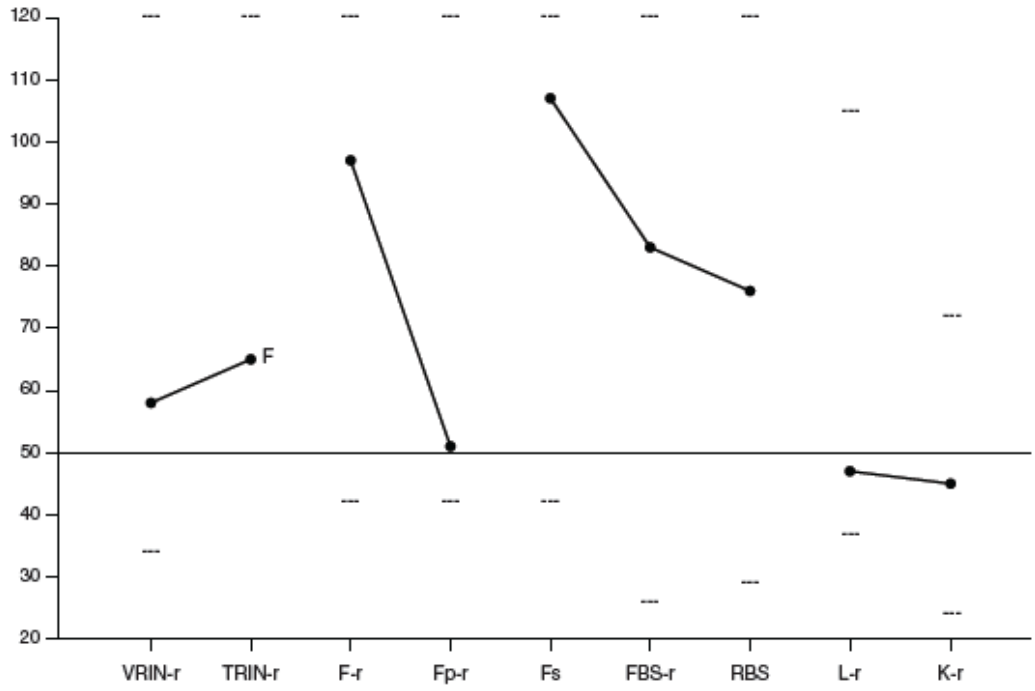
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	3	12	10	8	8	16	11	8	5
T Score:	48	57 T	88	111	107	77	76	76	42
Response %:	96	96	97	95	100	97	100	93	**86**

Cannot Say (Raw): 9 Percent True (of items answered): 36%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



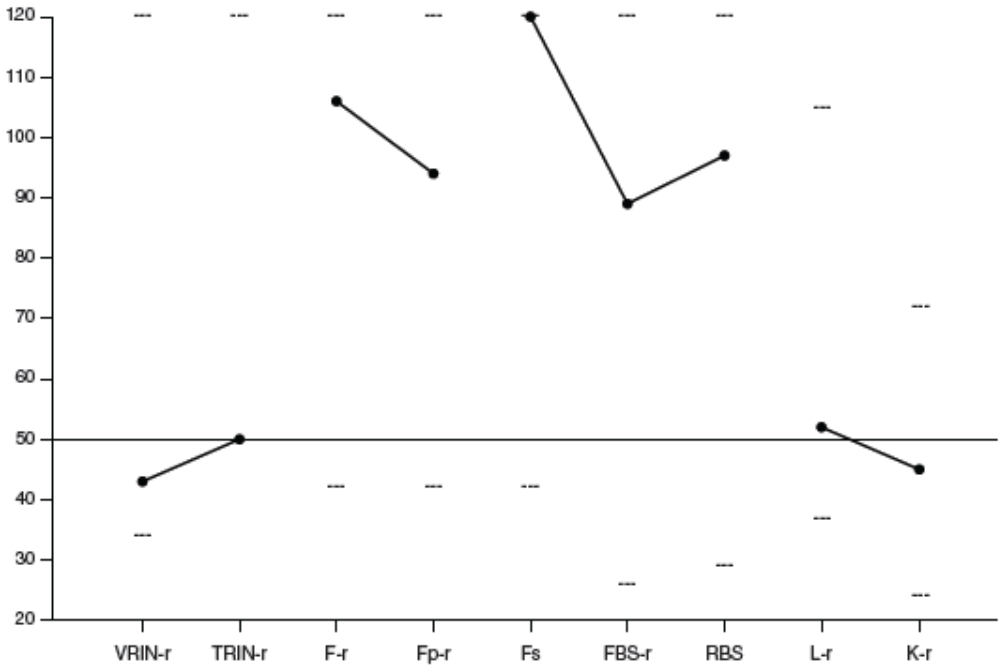
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	5	9	12	1	8	18	11	2	6
T Score:	58	65 F	97	51	107	83	76	47	45
Response %:	98	96	100	100	100	100	100	100	100

Cannot Say (Raw): 1 Percent True (of items answered): 45%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



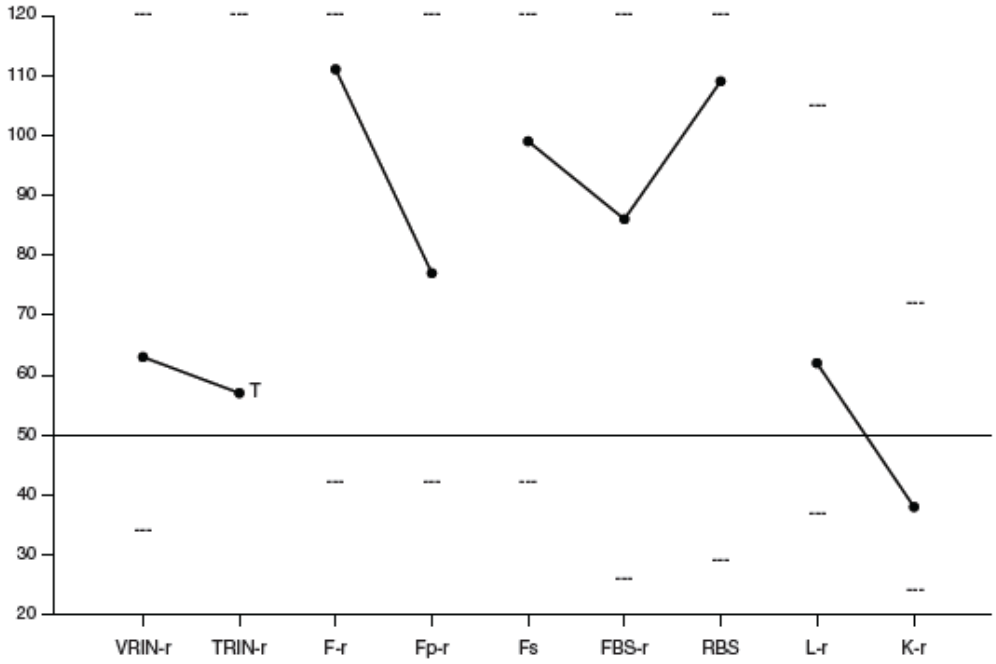
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	2	11	14	6	11	20	16	3	6
T Score:	43	50	106	94	120	89	97	52	45
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 46%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



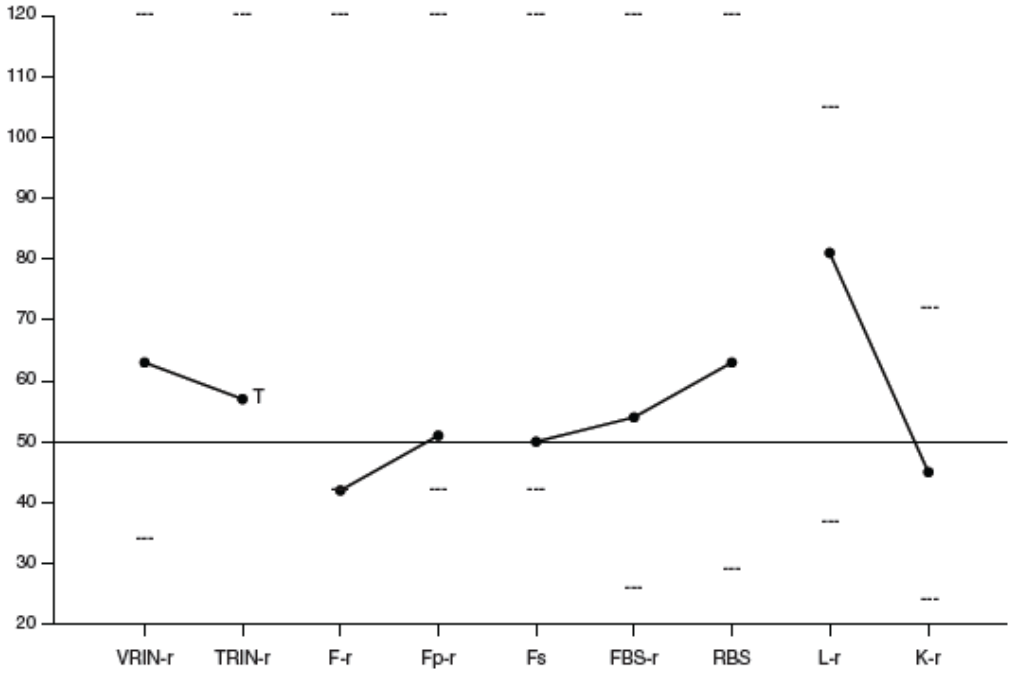
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	6	12	15	4	7	19	19	5	4
T Score:	63	57 T	111	77	99	86	109	62	38
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 50%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



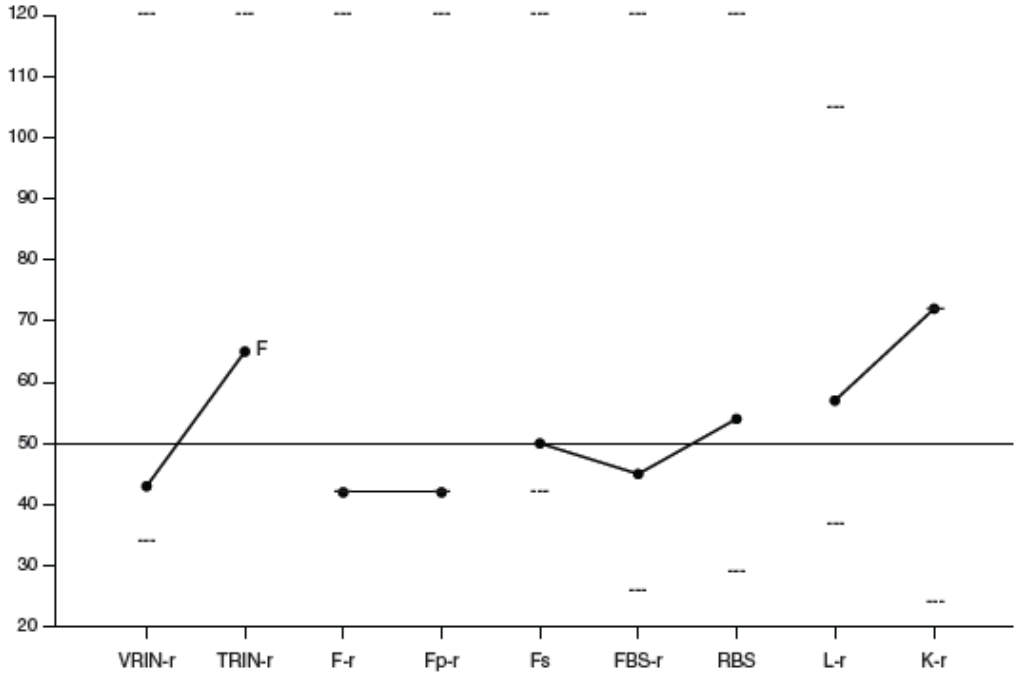
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	6	12	0	1	1	9	8	9	6
T Score:	63	57 T	42	51	50	54	63	81	45
Response %:	100	100	100	100	94	97	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 40%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



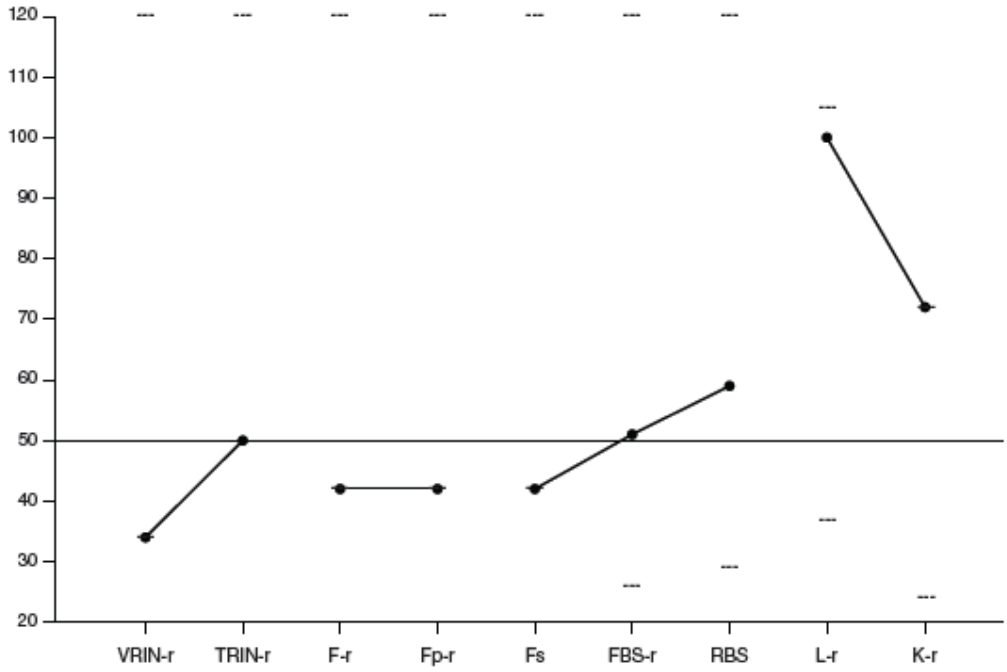
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	2	9	0	0	1	6	6	4	14
T Score:	43	65 F	42	42	50	45	54	57	72
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 28%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	0	11	0	0	0	8	7	13	14
T Score:	34	50	42	42	42	51	59	100	72
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 25%

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF® Interpretation Worksheet

Protocol Validity

Content Non-Responsiveness CNS 0 VRIN-r 34 TRIN-r 50

The test taker provided scorable responses to all 338 items.

There is evidence of remarkably consistent responding.

There is no evidence of content-inconsistent fixed responding.

Overreporting F-r 42 Fp-r 42 Fs 42 FBS-r 51 RBS 59

There is no evidence of overreporting.

Underreporting L-r 100 K-r 72

Underreporting is indicated by the test taker presenting himself in an extremely positive light by denying minor faults and shortcomings that most people acknowledge. Underreporting is also indicated by the test taker presenting himself as remarkably well adjusted. Any absence of elevation on the substantive scales should be interpreted with caution. Elevated scores in the substantitve scales may underestimate the problems assessed by those scales.

MMPI-2-RF Interpretation

- Substantive Scale Interpretation
  - Begin with Higher-Order Scales
    - If only one is elevated, use it as starting point then interpret all RC, Specific Problems, PSY-5 scales in that area
      - When interpreting RC Scales:
        - » proceed in order of elevation
        - » incorporate relevant SP Scales and PSY-5

Substantive Scale Interpretation

Somatic/Cognitive Dysfunction RC1 ____ GIC ____ NUC ____
MLS ____ HPC ____ COG ____

Emotional Dysfunction EID ____ RCd ____ RC2 ____ RC7 ____
SUI ____ INT-r ____ STW ____
HLP ____ AXY ____
SFD ____ ANP ____
NFC ____ BRF ____
MSF ____
NEGE-r ____

Figure 8-1. MMPI-2-RF Interpretation worksheet, continued.

MMPI-2-RF Interpretation

- Substantive Scale Interpretation
  - Begin with Higher-Order Scales
    - If only one is elevated, use it as starting point then interpret all RC, Specific Problems, PSY-5 scales in that area
      - When interpreting RC Scales:
        - » proceed in order of elevation
        - » incorporate relevant SP Scales and PSY-5
    - If more than one H-O Scale is elevated, use highest as starting point, then proceed to next highest
    - If no H-O Scale is elevated, proceed to RC Scales and interpret by domain in order of elevation incorporating relevant SP and PSY-5 scales

INTERPRETING THE MMPI-2 RF

MMPI-2-RF Interpretation

- Substantive Scale Interpretation
  - Once all H-O and RC Scales are covered:
    - Interpret any remaining elevated SP Scales
    - Interpret Interpersonal and Interest scales
    - If relevant, add diagnostic and treatment considerations

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MMPI-2-RF

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

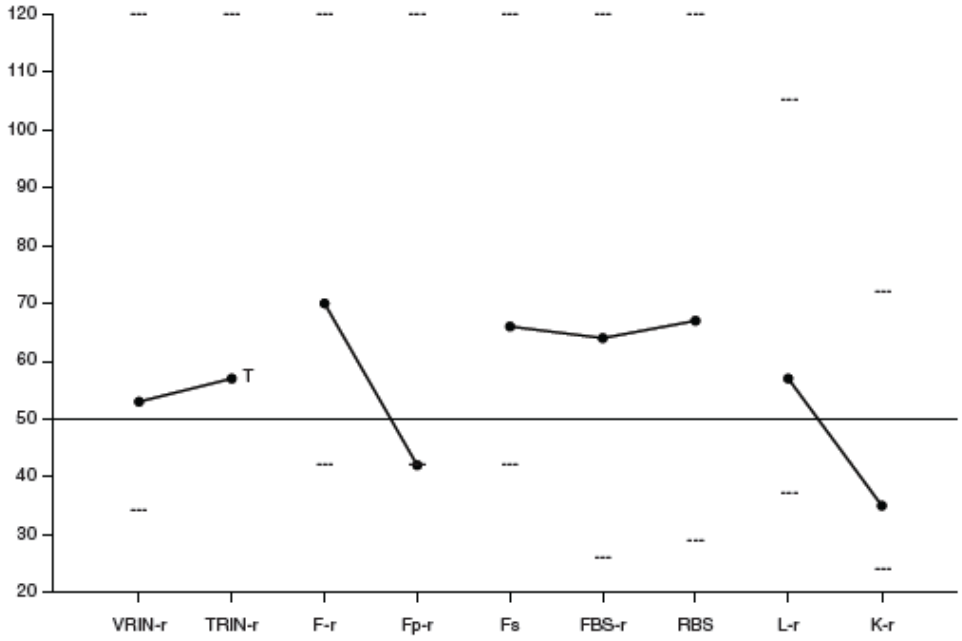
Name:	Mr. B
ID Number:	Fig804
Age:	47
Gender:	Male
Marital Status:	Married
Years of Education:	Not reported
Date Assessed:	04/22/2011

PsychCorp

[2.1 / 1 / 2.8.6]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



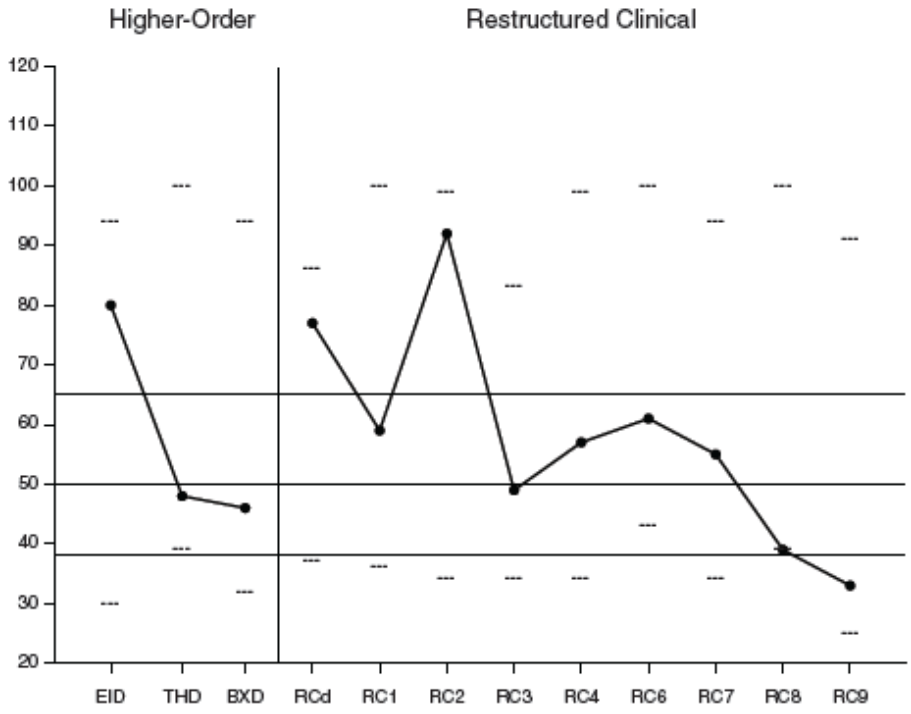
	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	12	6	0	3	12	9	4	3
T Score:	53	57 T	70	42	66	64	67	57	35
Response %:	100	100	100	95	100	100	100	100	100

Cannot Say (Raw): 1 Percent True (of items answered): 37%

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	32	1	4	19	6	15	6	7	2	9	0	3
T Score:	80	48	46	77	59	92	49	57	61	55	39	33
Response %:	100	100	100	100	100	100	100	100	100	100	100	100

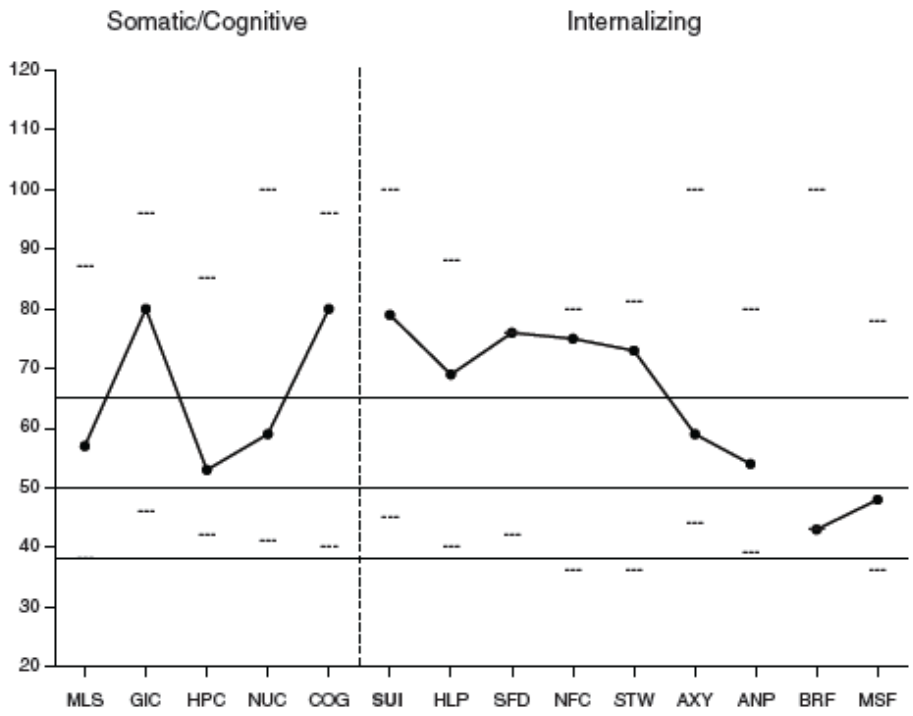
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales

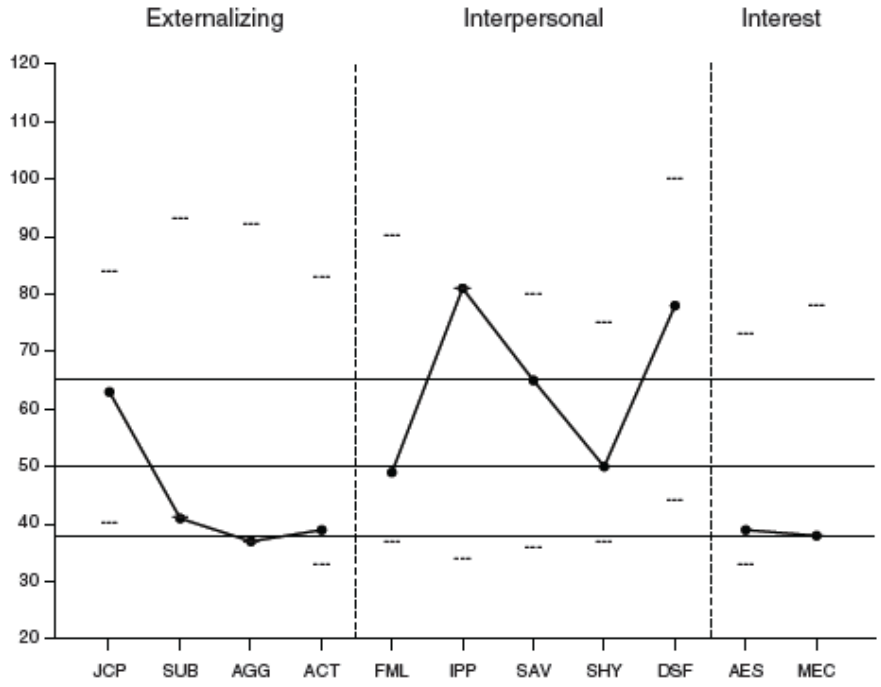


	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	3	3	1	2	7	2	3	4	8	6	1	3	0	3
T Score:	57	80	53	59	80	**79**	69	76	75	73	59	54	43	48
Response %:	100	100	100	100	100	100	100	100	100	100	100	100	100	100

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales

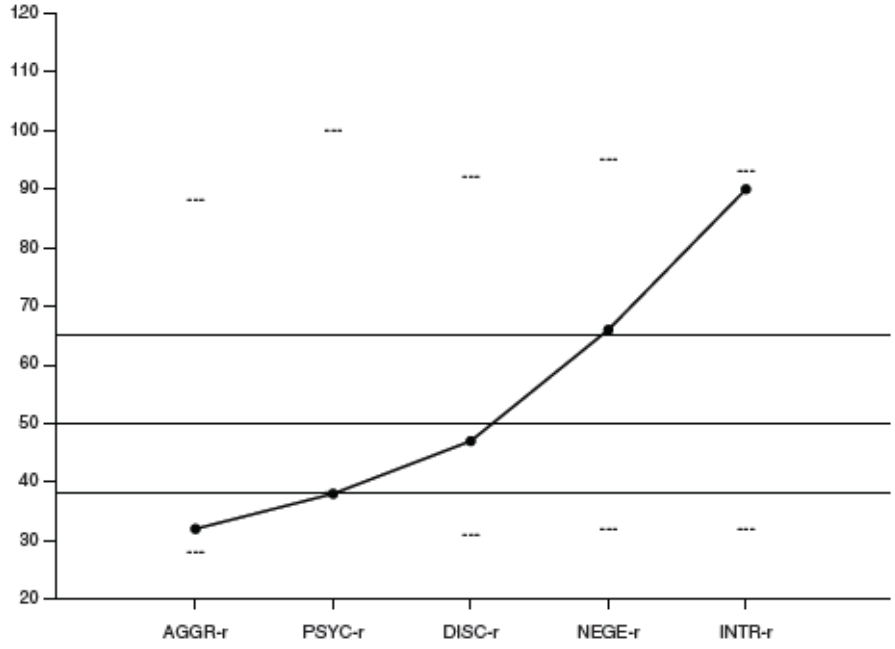


	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	3	0	0	1	2	10	7	3	3	1	0
T Score:	63	41	37	39	49	81	65	50	78	39	38
Response %:	100	100	100	100	100	100	100	100	100	100	100

The highest and lowest T scores possible on each scale are indicated by a '---'; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	1	0	5	12	19
T Score:	32	38	47	66	90
Response %:	100	100	100	100	100

The highest and lowest T scores possible on each scale are indicated by a '---"; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness	1 CNS	53 VRIN-r	57 T TRIN-r				
Over-Reporting	70 F-r	42 Fp-r		66 Fs	64 FBS-r	67 RBS	
Under-Reporting	57 L-r	35 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction	59 RC1	57 MLS	80 GIC	53 HPC	59 NUC	80 COG	
Emotional Dysfunction	80 EID	77 RCd	**79** SUI	69 HLP	76 SFD	75 NFC	
		92 RC2	90 INTR-r				
		55 RC7	73 STW	59 AXY	54 ANP	43 BRF	48 MSF	66 NEGE-r
Thought Dysfunction	48 THD	61 RC6					
		39 RC8					
		38 PSYC-r					
Behavioral Dysfunction	46 BXD	57 RC4	63 JCP	41 SUB			
		33 RC9	37 AGG	39 ACT	32 AGGR-r	47 DISC-r	
Interpersonal Functioning	49 FML	49 RC3	81 IPP	65 SAV	50 SHY	78 DSF	
Interests	39 AES	38 MEC					

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

Following is a list of items to which the test taker 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.

283.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample that answered each item in the keyed direction is provided in parentheses following the item content.

Suicidal/Death Ideation (SUI, T Score = 79)

120.
334.

ITEMS NOT SHOWN

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Helplessness/Hopelessness (HLP, T Score = 69)

169.
214.
336.

End of Report

MMPI-2-RF® Interpretation Worksheet

Mr. B

Protocol Validity

Content Non-Responsiveness CNS 1 VRIN-r 53 TRIN-r 57T

There are no indications of non-responsiveness.

Overreporting F-r 70 Fp-r 42 Fs 66 FBS-r 64 RBS ___

There are no indications of overreporting.

Underreporting L-r 57 K-r 35

There are no indications of underreporting.

Figure 8-5. Mr. B's MMPI-2-RF completed interpretation worksheet.

Substantive Scale Interpretation

Somatic/Cognitive Dysfunction RC1 59 GIC 80 NUC 59
MLS 57 HPC 53 COG 80

He reports a large number of gastrointestinal complaints and likely has a history of gastrointestinal problems and is preoccupied with health concerns. He reports a diffuse pattern of cognitive difficulties including memory problems, difficulties concentrating, intellectual limitations, and confusion. He is likely to complain about memory problems, to have a low tolerance for frustration, and to experience difficulties in concentration.

Emotional Dysfunction EID 80 RCd 77 RC2 92 RC7 55
SUI 79 INT-r 90 STW 73
HLP 69 AXY 59
SFD 76 ANP 54
NFC 75 BRF 43
MSF 48
NEGE-r 66

His responses indicate considerable emotional distress that is likely to be perceived as a crisis. He reports a lack of positive emotional experiences, significant anhedonia, and lack of interest. He is very likely to be pessimistic, to be socially introverted and disengaged, to lack energy, and to display vegetative depression. He reports being sad and unhappy, and being dissatisfied with his current life circumstances. He reports a history of suicidal ideation and/or attempts and is likely to be preoccupied with suicide or death, is at risk for a suicide attempt, and may have recently attempted suicide. He reports feeling hopeless and pessimistic and likely feels overwhelmed and that life is a strain, believes he cannot be helped, believes he gets a raw deal from life, and lacks motivation for change. He reports lacking confidence, and likely feels inferior and insecure, is self-disparaging, is prone to rumination, is intropunitive, and presents with lack of confidence and feelings of uselessness. He reports being passive, indecisive, and inefficacious and believes he is incapable of coping with his current difficulties. He is unlikely to be self-reliant. He reports an above average level of stress and worry and is likely to be stress-reactive and worry-prone and to engage in obsessive rumination.

Figure 8-5. Mr. B's MMPI-2-RF completed interpretation worksheet, continued.

Thought Dysfunction THD 44 RC6 61 RC8 39 PSYC-r 38

There are no indications of thought dysfunction.

Behavioral Dysfunction BXD 44 RC4 57 RC9 33 AGGR-r 32
JCP 63 AGG 37 DISC-r 47
SUB 41 ACT 39

He reports a below average level of activation and engagement with his environment and is liketly to have a very low energy level and be disengaged from his environment. He reports a below average level of physically aggressive behavior and reports being interpersonally passive and submissive.

Interpersonal Functioning:

FML 49 RC3 49 IPP 81 SAV 65 SHY 50 DSF 78

He reports being unassertive and submissive, not liking to be in charge, failing to stand up for himself, and being ready to give in to others. He is likely to be passive and submissive in his interpersonal relationships and to be over-controlled. He reports not enjoying social events and avoiding social situations. He is likely to be introverted, have difficulty forming close relationships, and be emotionally restricted. He reports disliking people and being around them and is likely to be asocial.

Figure 8-5. Mr. B's MMPI-2-RF completed interpretation worksheet, continued.

Interests: AES 39 MEC 38

He reports no interest in activities or occupations of a mechanical or physical nature (e.g., fixing and building things, the outdoors, sports).

Diagnostic Considerations

If physical origin for gastrointestical complaints have been ruled out, evaluate for Somatoform Disorder.

Internalizing Disorders.

Major Depression.

Cluster C Personality Disorder.

Disorders involving excessive stress and worry such as Obsessive-Compulsive Disorder.

Dependent Personality Disorder.

Treatment Considerations

Stress reduction for gastrointestinal complaints. Origin of cognitive complaints should be explored. Emotional difficulties may motivate him for treatment. Evaluate need for antidepressant medication. May require inpatient treatment for significant depression. Low positive emotions may interefere with treatment. Anhedinia as a target for treatment. RISK FOR SUICIDE SHOULD BE ASSESSED IMMEDIATELY. Loss of hope and feelings of despair as early targets for intervention. Indecisiveness may interfere with establishing treatment goals and progress in treatment. Stress management and excessive worry and rumination as targets for intervention. Reducing passive-submissive behavior as a target for intervention. His aversive response to relationships may make it difficult to form a therapeutic alliance. Lack of outside interests as a target for intervention.

Figure 8-5. Mr. B's MMPI-2-RF completed interpretation worksheet, continued.

CHAPTER 9:
MMPI-2-RF CASE STUDIES

Ms. G: Obsessive-Compulsive Symptoms

- 35 year old, single, woman
- Self-referred for outpatient treatment at a community mental health center
- Recently lost her job owing to obsessive-compulsive behavior
- Preoccupied with worry that her apartment will catch fire or be burglarized
- Engaged to repeated checking behavior of increasing intensity that interfered with job performance (tardiness, productivity)
- After repeated warnings, let go

INTERPRETING THE MMPI 2 RF

Ms. G: Obsessive-Compulsive Symptoms

- Raised in an intact family with no reported abuse history
- Had been involved in long-term relationship that ended a few moths prior to seeking services
- Had resided with ex-boyfriend most of her adult life
- No prior contact with the mental health system
- At intake, reported feeling anxious, depressed, embarrassed, and guilty over job loss

MMPI-2-RF®

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

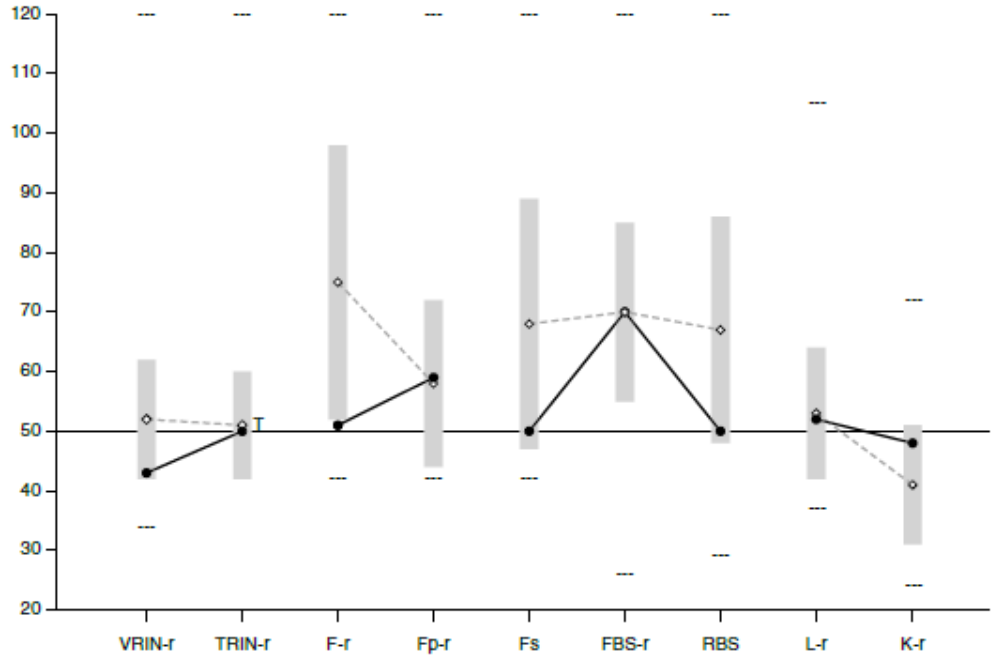
ID Number:	Fig901
Age:	35
Gender:	Female
Marital Status:	Not reported
Years of Education:	Not reported
Date Assessed:	04/22/2011

PsychCorp

[3.0 / 1 / 3.1.13]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	2	11	2	2	1	14	5	3	7
T Score:	43	50	51	59	50	70	50	52	48
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 47%

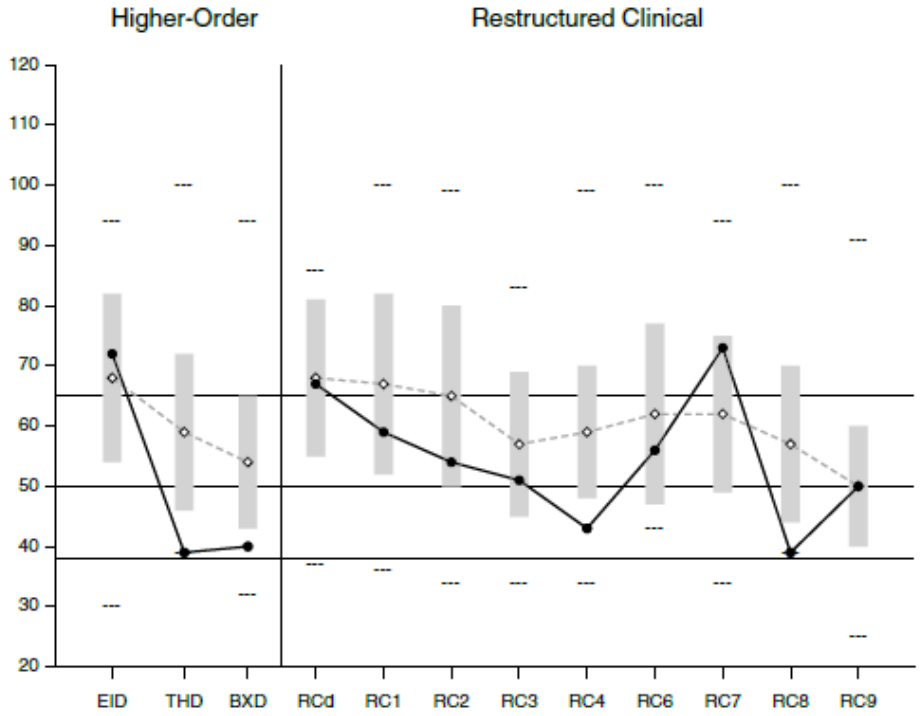
Comparison Group Data: Outpatient, Community Mental Health Center (Women), N = 582

Mean Score (◇---◇):	52	51 T	75	58	68	70	67	53	41
Standard Dev (±1 SD):	10	9	23	14	21	15	19	11	10
Percent scoring at or below test taker:	32	37	21	69	30	56	25	61	84

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	26	0	2	14	6	5	7	2	1	16	0	12
T Score:	72	39	40	67	59	54	51	43	56	73	39	50
Response %:	100	100	100	100	100	100	100	100	100	100	100	100

Comparison Group Data: Outpatient, Community Mental Health Center (Women), N = 582

Mean Score (◇—◇):	68	59	54	68	67	65	57	59	62	62	57	50
Standard Dev (±1 SD):	14	13	11	13	15	15	12	11	15	13	13	10
Percent scoring at or below test taker:	58	12	13	43	36	31	41	9	43	80	14	62

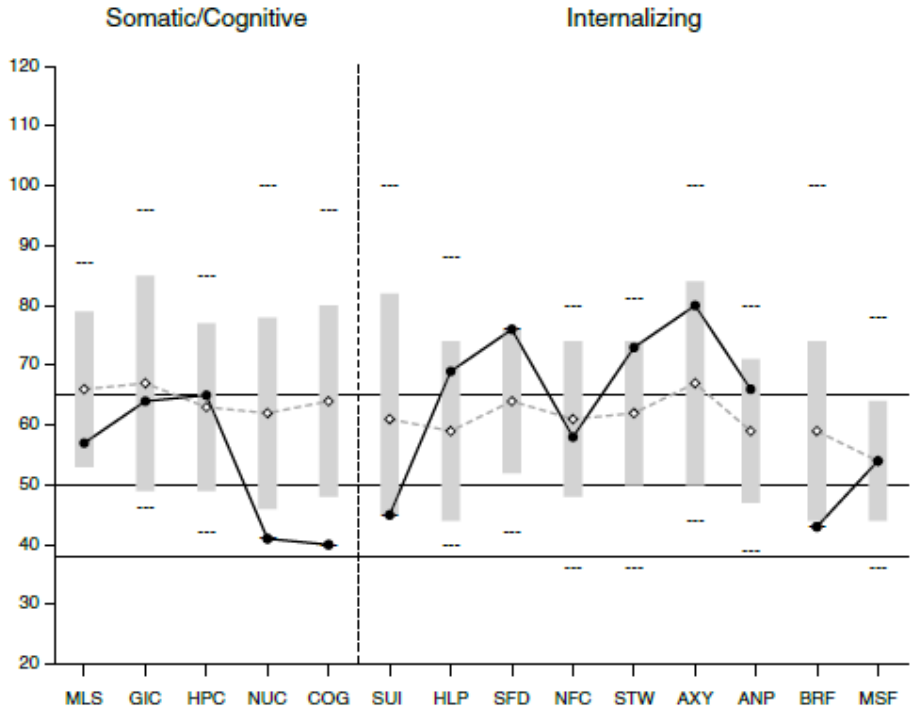
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales



	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	3	1	3	0	0	0	3	4	5	6	3	5	0	5
T Score:	57	64	65	41	40	45	69	76	58	73	80	66	43	54
Response %:	100	100	100	100	100	100	100	100	100	100	100	100	100	100

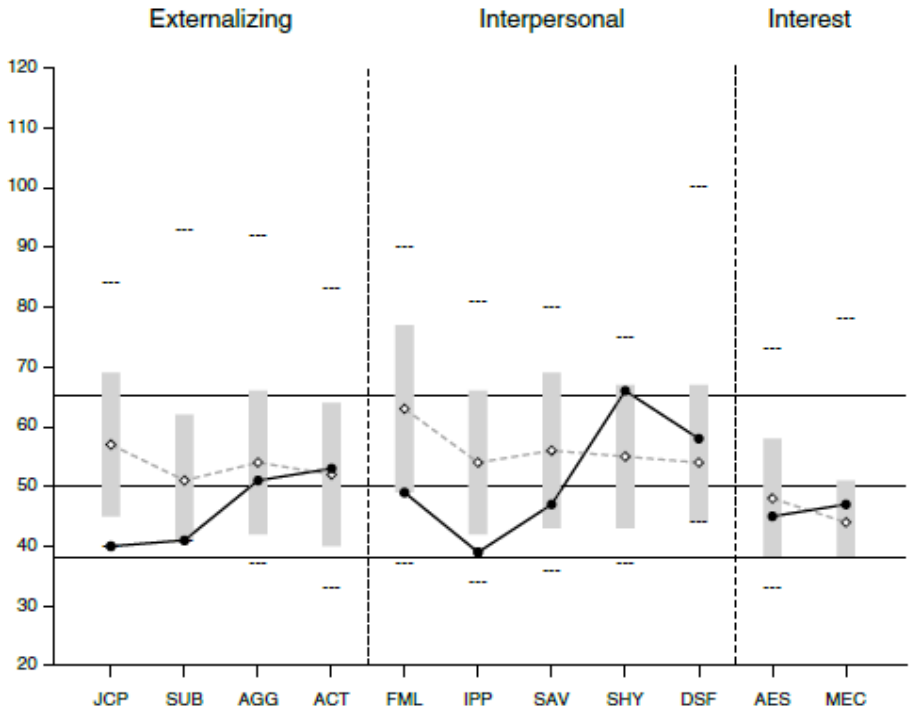
Comparison Group Data: Outpatient, Community Mental Health Center (Women), N = 582

	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Mean Score (◇---◇):	66	67	63	62	64	61	59	64	61	62	67	59	59	54
Standard Dev (±1 SD):	13	18	14	16	16	21	15	12	13	12	17	12	15	10
Percent scoring at or below test taker:	34	53	61	20	14	58	79	100	51	90	84	76	33	63

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales



	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	0	0	2	4	2	1	2	6	1	2	2
T Score:	40	41	51	53	49	39	47	66	58	45	47
Response %:	100	100	100	100	100	100	100	100	100	100	100

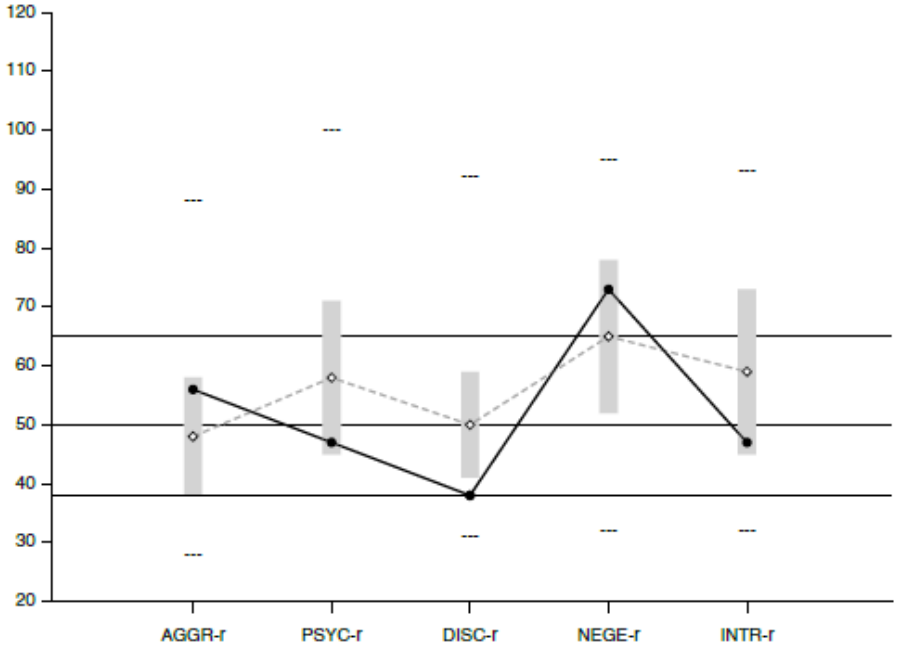
Comparison Group Data: Outpatient, Community Mental Health Center (Women), N = 582

Mean Score (◇--◇):	57	51	54	52	63	54	56	55	54	48	44
Standard Dev (±1 SD):	12	11	12	12	14	12	13	12	13	10	7
Percent scoring at or below test taker:	19	39	52	68	23	10	35	85	78	50	81

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	11	1	2	14	5
T Score:	56	47	38	73	47
Response %:	100	100	100	100	100

Comparison Group Data: Outpatient, Community Mental Health Center (Women), N = 582

Mean Score (◇---◇):	48	58	50	65	59
Standard Dev (±1 SD):	10	13	9	13	14
Percent scoring at or below test taker:	87	28	15	74	26

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness	0 CNS	43 VRIN-r	50 TRIN-r				
Over-Reporting	51 F-r	59 Fp-r		50 Fs	70 FBS-r	50 RBS	
Under-Reporting	52 L-r	48 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction	59 RC1	57 MLS	64 GIC	65 HPC	41 NUC	40 COG		
Emotional Dysfunction	72 EID	67 RCd	45 SUI	69 HLP	76 SFD	58 NFC		
		54 RC2	47 INTR-r					
		73 RC7	73 STW	80 AXY	66 ANP	43 BRF	54 MSF	73 NEGE-r
Thought Dysfunction	39 THD	56 RC6						
		39 RC8						
		47 PSYC-r						
Behavioral Dysfunction	40 BXD	43 RC4	40 JCP	41 SUB				
		50 RC9	51 AGG	53 ACT	56 AGGR-r	38 DISC-r		
Interpersonal Functioning	49 FML	51 RC3	39 IPP	47 SAV	66 SHY	58 DSF		
Interests	45 AES	47 MEC						

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

The test taker produced scorable responses to all the MMPI-2-RF items.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if her T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample (NS) and of the Outpatient, Community Mental Health Center (Women) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Helplessness/Hopelessness (HLP, T Score = 69)

135.
282.
336.

ITEMS NOT SHOWN

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Anxiety (AXY, T Score = 80)

228.
275.

289.

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.

Mr. P: Chronic and Severe Disorder

- 49 year old, single, male
- Assessed at intake to an inpatient psychiatric unit of a community hospital
- Long standing diagnosis of Schizophrenia, Paranoid Type
- Diagnosed during later teens and resided with parents most of his adult life
- Father passed away when Mr. P was in his late 20s
- Continues to reside with mother, now in her late 70s
- Receives case management services in the community

INTERPRETING THE MMPI 2 RF

Mr. P: Chronic and Severe Disorder

- Periodically employed as an unskilled laborer under the auspices of local community mental health agency
- Several weeks prior to hospitalization, became embroiled in conflict with co-worker
- Employment suspended following physical altercation
- Because upset and discontinued medication
- Mother reported fairly rapid deterioration, marked by preoccupation with government conspiracy to deprive him of disability benefits
- Threatened retaliation against supervisor and co-worker

MMPI-2-RF®

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

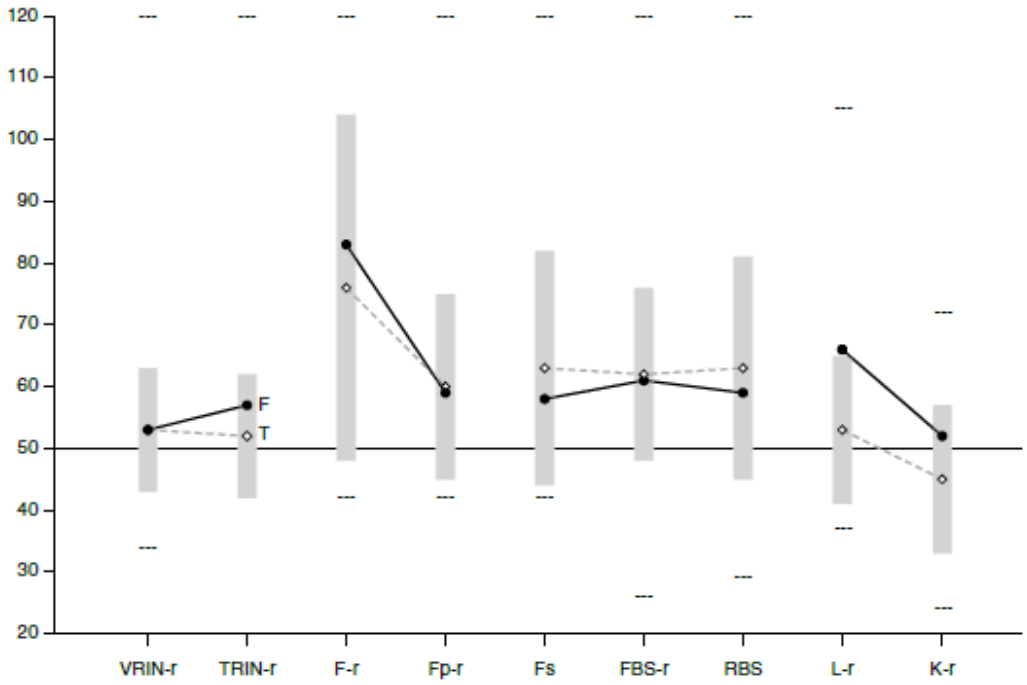
ID Number:	Fig902
Age:	49
Gender:	Male
Marital Status:	Never Married
Years of Education:	11
Date Assessed:	04/22/2011

PsychCorp

[3.0 / 1 / 3.1.13]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	10	9	2	2	11	7	6	8
T Score:	53	57 F	83	59	58	61	59	66	52
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 2 Percent True (of items answered): 42%

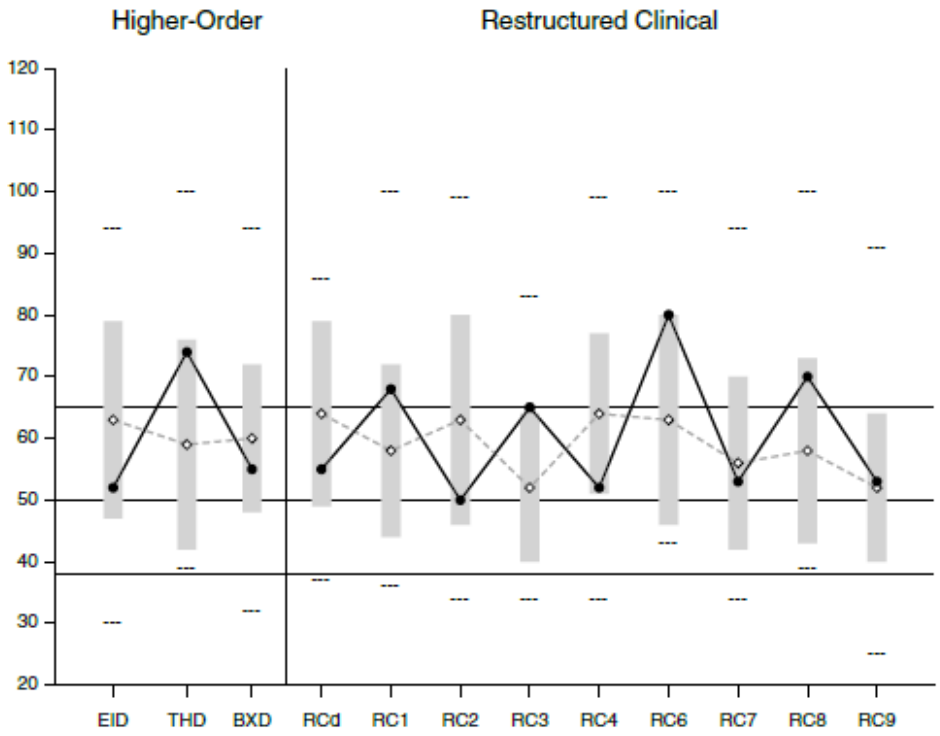
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	53	52 T	76	60	63	62	63	53	45
Standard Dev (±1 SD):	10	10	28	15	19	14	18	12	12
Percent scoring at or below test taker:	63	76	67	64	58	55	51	88	75

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	11	8	8	7	10	4	11	5	6	8	7	14
T Score:	52	74	55	55	68	50	65	52	80	53	70	53
Response %:	98	100	100	96	100	100	100	100	100	100	100	100

Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	63	59	60	64	58	63	52	64	63	56	58	52
Standard Dev (±1 SD):	16	17	12	15	14	17	12	13	17	14	15	12
Percent scoring at or below test taker:	32	84	40	35	78	32	87	22	85	50	82	64

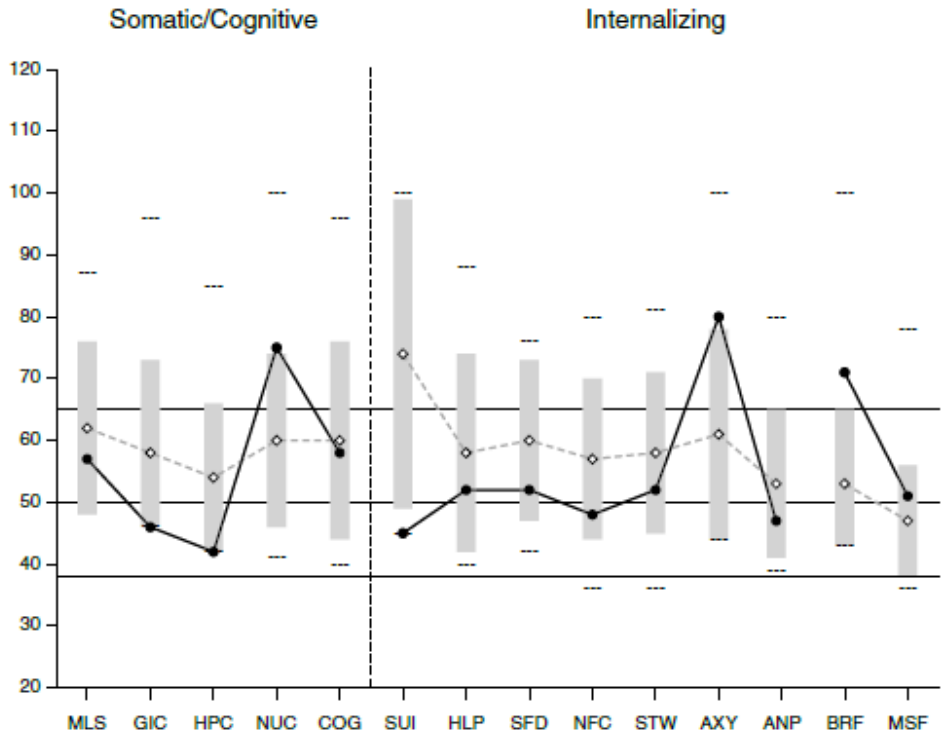
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales



	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	3	0	0	5	3	0	1	1	2	3	3	1	3	4
T Score:	57	46	42	75	58	45	52	52	48	52	80	47	71	51
Response %:	100	100	100	100	100	100	100	100	100	100	100	100	100	**89**

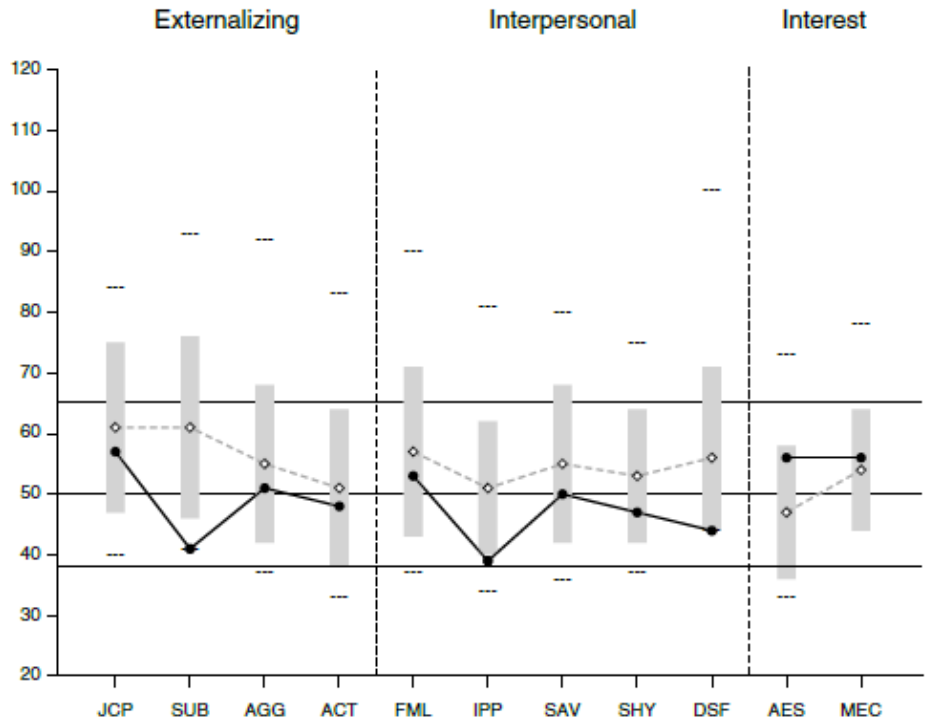
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	62	58	54	60	60	74	58	60	57	58	61	53	53	47
Standard Dev (±1 SD):	14	15	12	14	16	25	16	13	13	13	17	12	12	9
Percent scoring at or below test taker:	45	53	37	87	56	33	51	37	35	46	90	42	94	81

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales



	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	2	0	2	3	3	1	3	2	0	4	4
T Score:	57	41	51	48	53	39	50	47	44	56	56
Response %:	100	100	100	100	100	100	100	100	100	100	100

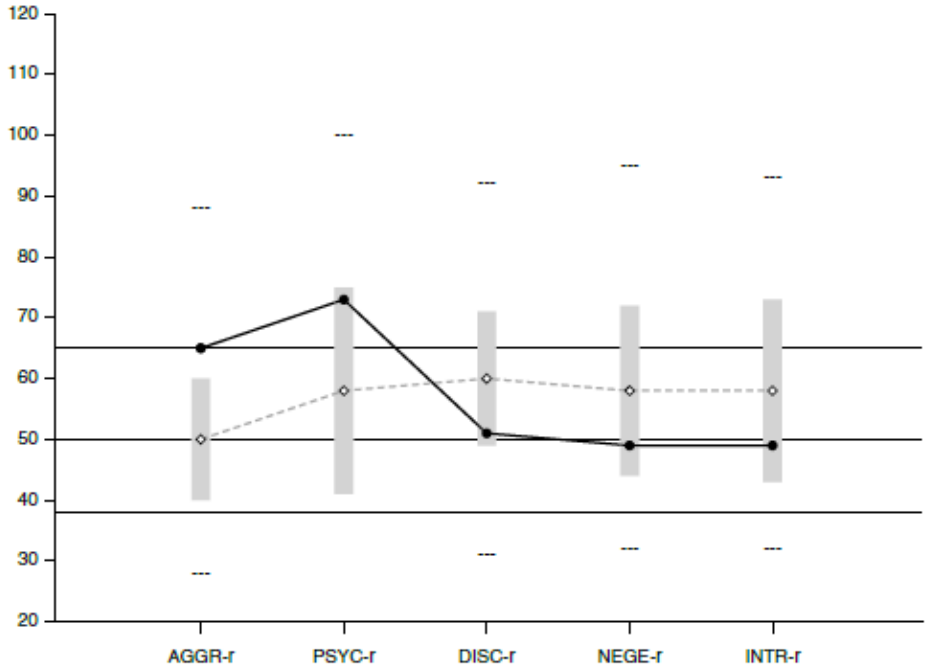
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Mean Score (◇---◇):	61	61	55	51	57	51	55	53	56	47	54
Standard Dev (±1 SD):	14	15	13	13	14	11	13	11	15	11	10
Percent scoring at or below test taker:	48	20	53	58	52	17	48	39	50	83	63

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	13	8	7	6	6
T Score:	65	73	51	49	49
Response %:	100	100	100	100	100

Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇—◇):	50	58	60	58	58
Standard Dev (±1 SD):	10	17	11	14	15
Percent scoring at or below test taker:	92	84	30	33	39

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness	2 CNS	53 VRIN-r	57 F TRIN-r				
Over-Reporting	83 F-r	59 Fp-r		58 Fs	61 FBS-r	59 RBS	
Under-Reporting	66 L-r	52 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction		68 RC1	57 MLS	46 GIC	42 HPC	75 NUC	58 COG	
Emotional Dysfunction	52 EID	55 RCd	45 SUI	52 HLP	52 SFD	48 NFC		
		50 RC2	49 INTR-r					
		53 RC7	52 STW	80 AXY	47 ANP	71 BRF	51* MSF	49 NEGE-r
Thought Dysfunction	74 THD	80 RC6						
		70 RC8						
		73 PSYC-r						
Behavioral Dysfunction	55 BXD	52 RC4	57 JCP	41 SUB				
		53 RC9	51 AGG	48 ACT	65 AGGR-r	51 DISC-r		
Interpersonal Functioning		53 FML	65 RC3	39 IPP	50 SAV	47 SHY	44 DSF	
Interests		56 AES	56 MEC					

*The test taker provided scorable responses to less than 90% of the items scored on this scale. See the relevant profile page for the specific percentage.

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

Following is a list of items to which the test taker 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.

172.

184.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample (NS) and of the Psychiatric Inpatient, Community Hospital (Men) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Anxiety (AXY, T Score = 80)

79.
275.

289.

Ideas of Persecution (RC6, T Score = 80)

150.
194.
212.
233.
264.
310.

Aberrant Experiences (RC8, T Score = 70)

32.
85.
179.

199.
216.
240.
330.

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Ms. L: An Abusive Relationship Ends

- 20 year old, single, female college student
- Presented at college counseling center complaining of academic difficulties following breakup
- Reported involvement in an abusive relationship for over a year
- Frequent arguments culminated in physical altercations
- Often triggered by Ms. L's suspicions regarding boyfriend's infidelity
- Altercations would often leave both with bruises
- Typically occurred when both were intoxicated
- Boyfriend terminated relationships three weeks prior to intake

INTERPRETING THE MMPI 2 RF

Ms. L: An Abusive Relationship Ends

- Ms. L went on a two-week drinking binge following breakup
- Had sexual relationships with several men she met at bars while using forged identification
- Stopped attending classes and missed several exams
- After friend threatened to inform her parents about activities, she stopped going to bars and started attending classes
- When she explained her absence to one of her professors, she recommended that Ms. L seek assistance at the counseling clinic

MMPI-2-RF®

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

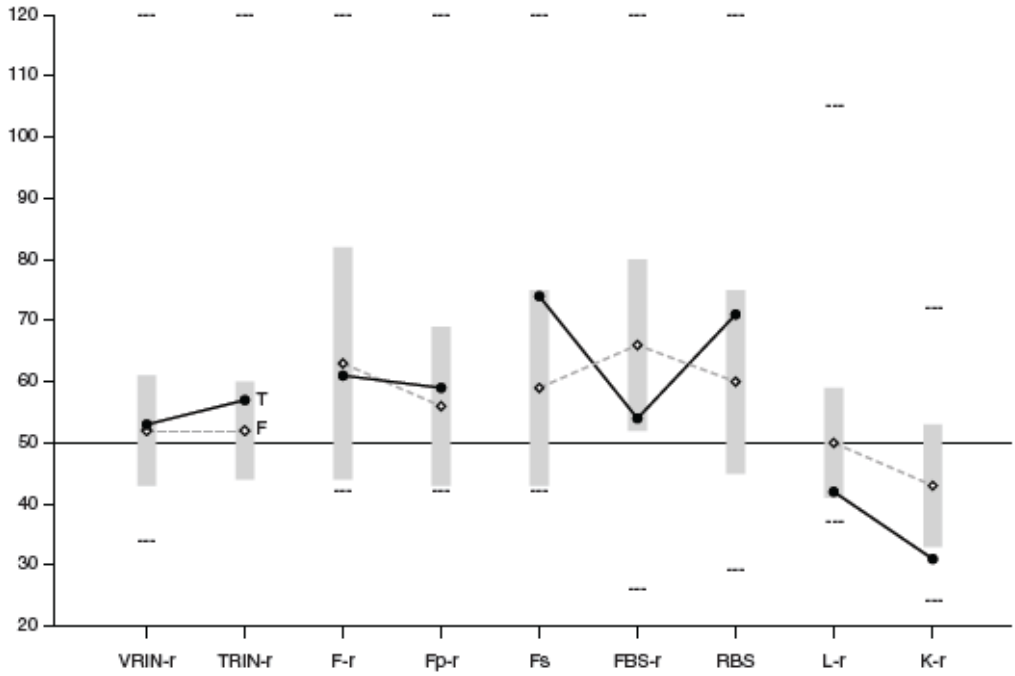
ID Number:	Fig903
Age:	20
Gender:	Female
Marital Status:	Never Married
Years of Education:	15
Date Assessed:	04/22/2011

PsychCorp

[3.0 / 1 / 3.1.13]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	4	12	4	2	4	9	10	1	2
T Score:	53	57 T	61	59	74	54	71	42	31
Response %:	100	96	100	100	100	100	100	100	100

Cannot Say (Raw): 3 Percent True (of items answered): 48%

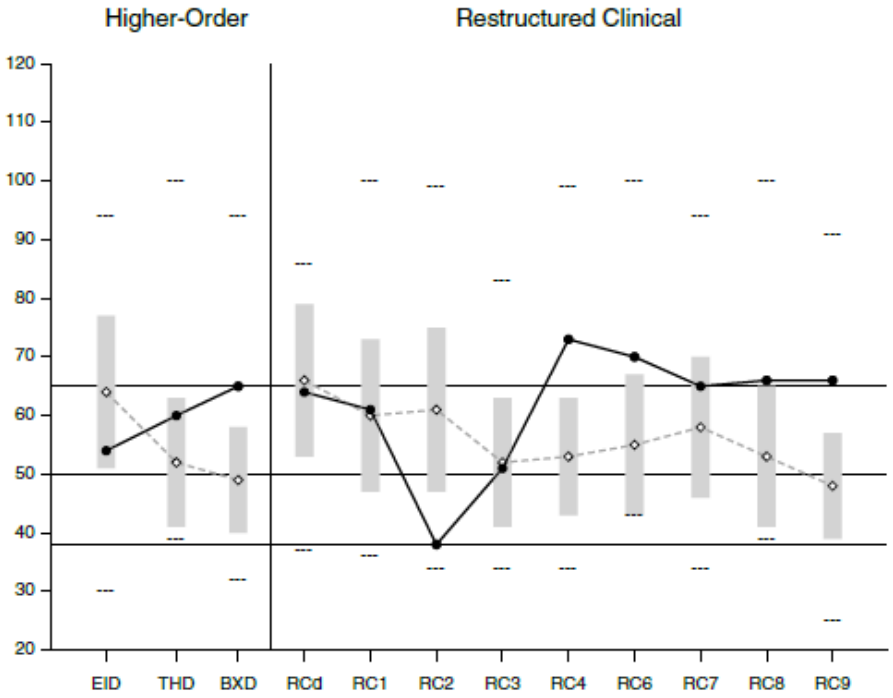
Comparison Group Data: College Counseling Clinic (Women), N = 894

Mean Score (◇---◇):	52	52 F	63	56	59	66	60	50	43
Standard Dev (±1 SD):	9	8	19	13	16	14	15	9	10
Percent scoring at or below test taker:	67	84	61	76	88	27	82	31	15

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	13	4	12	12	7	1	7	13	4	13	6	19
T Score:	54	60	65	64	61	38	51	73	70	65	66	66
Response %:	98	96	100	100	100	100	93	100	100	100	94	100

Comparison Group Data: College Counseling Clinic (Women), N = 894

	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Mean Score (◇---◇):	64	52	49	66	60	61	52	53	55	58	53	48
Standard Dev (±1 SD):	13	11	9	13	13	14	11	10	12	12	12	9
Percent scoring at or below test taker:	27	84	96	45	59	5	61	97	92	74	89	96

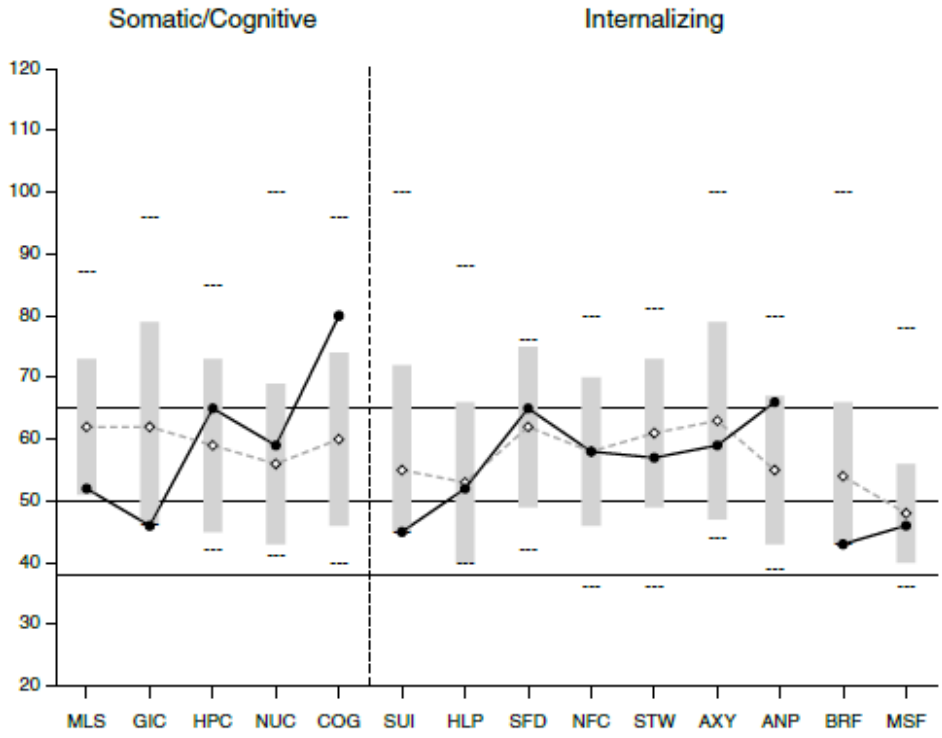
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales



	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	2	0	3	2	7	0	1	3	5	4	1	5	0	2
T Score:	52	46	65	59	80	45	52	65	58	57	59	66	43	46
Response %:	100	100	100	100	100	100	100	100	100	**86**	100	100	100	100

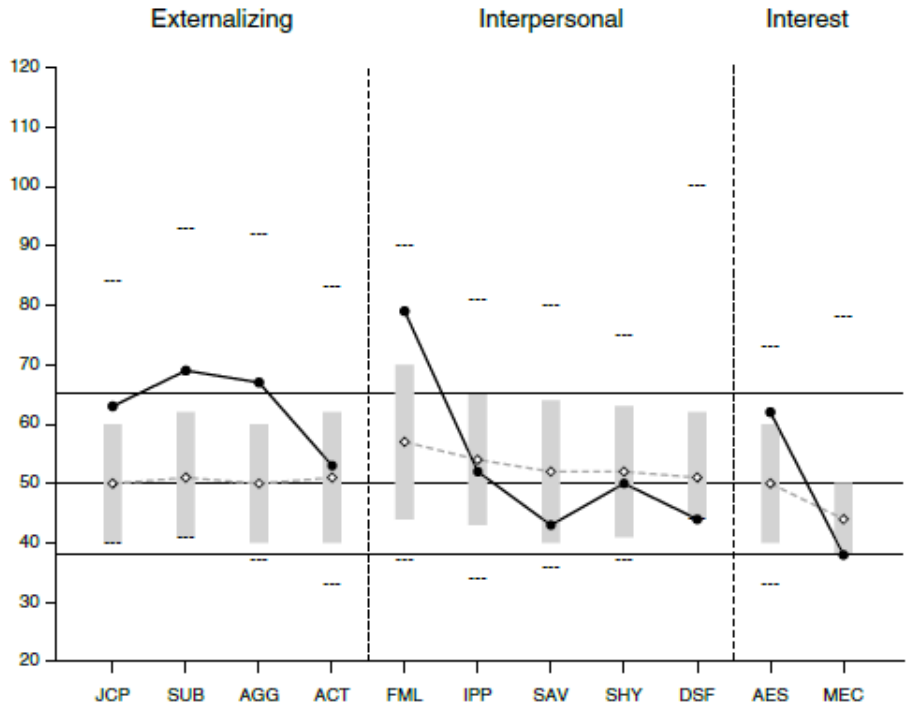
Comparison Group Data: College Counseling Clinic (Women), N = 894

Mean Score (◇---◇):	62	62	59	56	60	55	53	62	58	61	63	55	54	48
Standard Dev (±1 SD):	11	17	14	13	14	17	13	13	12	12	16	12	12	8
Percent scoring at or below test taker:	28	45	73	72	93	70	63	62	62	52	57	85	45	45

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales



	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	3	4	5	4	8	5	1	3	0	5	0
T Score:	63	69	67	53	79	52	43	50	44	62	38
Response %:	100	100	100	100	100	100	100	100	100	100	100

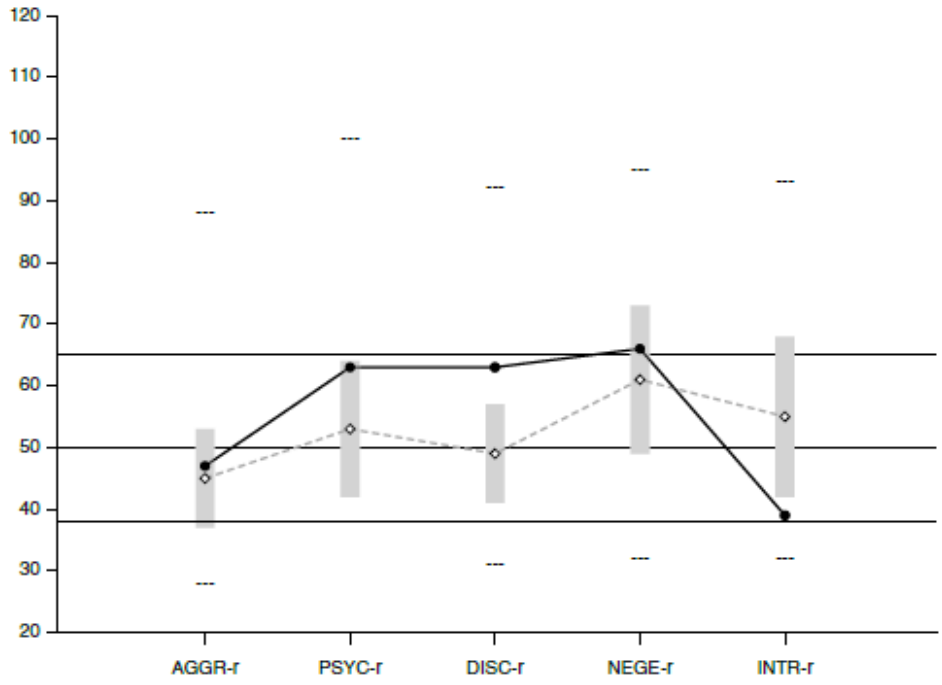
Comparison Group Data: College Counseling Clinic (Women), N = 894

Mean Score (◇---◇):	50	51	50	51	57	54	52	52	51	50	44
Standard Dev (±1 SD):	10	11	10	11	13	11	12	11	11	10	6
Percent scoring at or below test taker:	93	96	97	71	95	62	32	52	64	91	35

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	8	5	11	12	2
T Score:	47	63	63	66	39
Response %:	100	96	100	95	100
Comparison Group Data:	College Counseling Clinic (Women), N = 894				
Mean Score (◇---◇):	45	53	49	61	55
Standard Dev (±1 SD):	8	11	8	12	13
Percent scoring at or below test taker:	71	88	96	69	10

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness	3 CNS	53 VRIN-r	57 T TRIN-r				
Over-Reporting	61 F-r	59 Fp-r		74 Fs	54 FBS-r	71 RBS	
Under-Reporting	42 L-r	31 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction		61 RC1	52 MLS	46 GIC	65 HPC	59 NUC	80 COG	
Emotional Dysfunction	54 EID	64 RCd	45 SUI	52 HLP	65 SFD	58 NFC		
		38 RC2	39 INTR-r					
		65 RC7	57* STW	59 AXY	66 ANP	43 BRF	46 MSF	66 NEGE-r
Thought Dysfunction	60 THD	70 RC6						
		66 RC8						
		63 PSYC-r						
Behavioral Dysfunction	65 BXD	73 RC4	63 JCP	69 SUB				
		66 RC9	67 AGG	53 ACT	47 AGGR-r	63 DISC-r		
Interpersonal Functioning		79 FML	51 RC3	52 IPP	43 SAV	50 SHY	44 DSF	
Interests		62 AES	38 MEC					

*The test taker provided scorable responses to less than 90% of the items scored on this scale. See the relevant profile page for the specific percentage.

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

Following is a list of items to which the test taker 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.

73.
85.
238.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if her T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample (NS) and of the College Counseling Clinic (Women) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Ideas of Persecution (RC6, T Score = 70)

194.
212.
233.
287.

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

Aberrant Experiences (RC8, T Score = 66)

32.
106.
159.
179.
199.
257.

Substance Abuse (SUB, T Score = 69)

49.
141.
237.
297.

Aggression (AGG, T Score = 67)

23.
26.
84.
316.
337.

Special Note:
The content of the test items
is included in the actual reports.
To protect the integrity of the test,
the item content does not appear
in this sample report.

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.

Mr. E: Substance-Induced Psychotic Symptoms

- 28 year old, single male
- Admitted to inpatient psychiatric unit of community hospital after presenting with suspected psychotic symptoms
- Extensive history of alcohol and drug abuse and unsuccessful treatments
- Assault led to arrest and current evaluation
- At intake described as still intoxicated following recent cocaine binge
- Thinking characterized as paranoid and suspicious, with religious preoccupation and obsessive rumination

INTERPRETING THE MMPI 2 RF

Mr. E: Substance-Induced Psychotic Symptoms

- No prior involvement with mental health system, but several failed substance abuse treatment programs
- Recent breakup
- Arrest followed altercation at a bar
- Caused serious injuries to stranger who had asked him to lower his voice
- Arresting officer noted Mr. P's religious preoccupation
- Taken to crisis stabilization unit where staff diagnosed intoxication following crack cocaine binge
- Possibly independent psychotic symptoms noted, with recommendation for inpatient observation

MMPI-2 RF®

Minnesota Multiphasic
Personality Inventory-2
Restructured Form®

Score Report

MMPI-2-RF®
Minnesota Multiphasic Personality Inventory-2-Restructured Form®
Yossef S. Ben-Porath, PhD, & Auke Tellegen, PhD

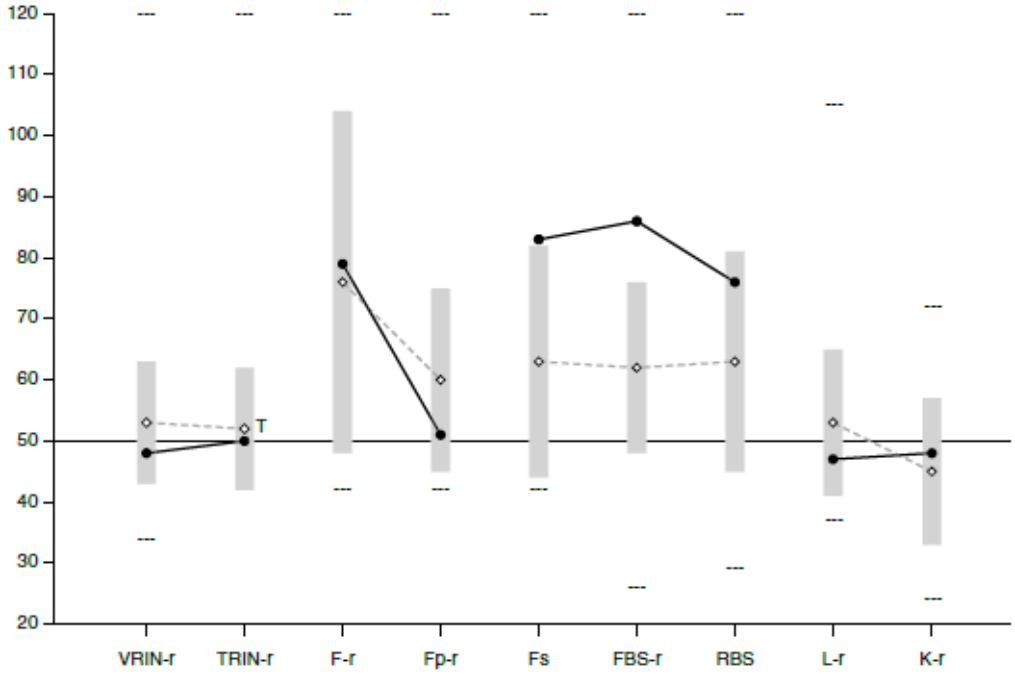
ID Number:	Fig904
Age:	28
Gender:	Male
Marital Status:	Not reported
Years of Education:	Not reported
Date Assessed:	04/22/2011

PsychCorp

[3.0 / 1 / 3.1.13]

ALWAYS LEARNING PEARSON

MMPI-2-RF Validity Scales



	VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Raw Score:	3	11	8	1	5	19	11	2	7
T Score:	48	50	79	51	83	86	76	47	48
Response %:	100	100	100	100	100	100	100	100	100

Cannot Say (Raw): 0 Percent True (of items answered): 47%

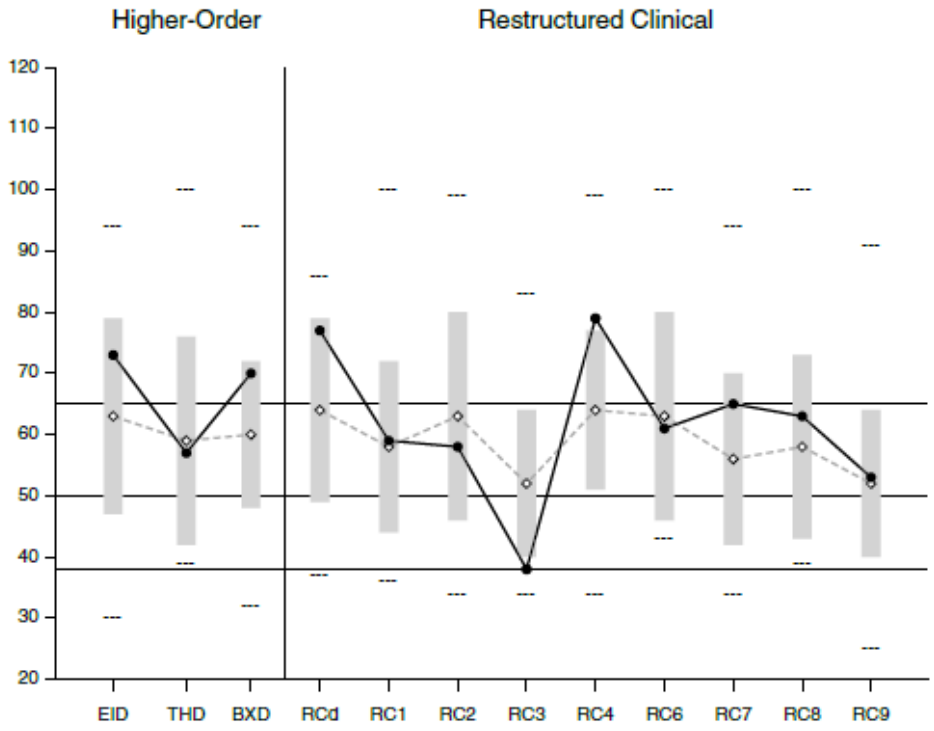
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	53	52 T	76	60	63	62	63	53	45
Standard Dev (±1 SD):	10	10	28	15	19	14	18	12	12
Percent scoring at or below test taker:	45	34	62	47	88	96	79	45	67

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

VRIN-r	Variable Response Inconsistency	Fs	Infrequent Somatic Responses	L-r	Uncommon Virtues
TRIN-r	True Response Inconsistency	FBS-r	Symptom Validity	K-r	Adjustment Validity
F-r	Infrequent Responses	RBS	Response Bias Scale		
Fp-r	Infrequent Psychopathology Responses				

MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales



	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Raw Score:	27	3	14	19	6	6	1	15	2	13	5	14
T Score:	73	57	70	77	59	58	38	79	61	65	63	53
Response %:	100	100	100	100	100	100	100	100	100	100	100	100

Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

	EID	THD	BXD	RCd	RC1	RC2	RC3	RC4	RC6	RC7	RC8	RC9
Mean Score (◇---◇):	63	59	60	64	58	63	52	64	63	56	58	52
Standard Dev (±1 SD):	16	17	12	15	14	17	12	13	17	14	15	12
Percent scoring at or below test taker:	68	59	81	74	58	45	12	88	56	75	71	64

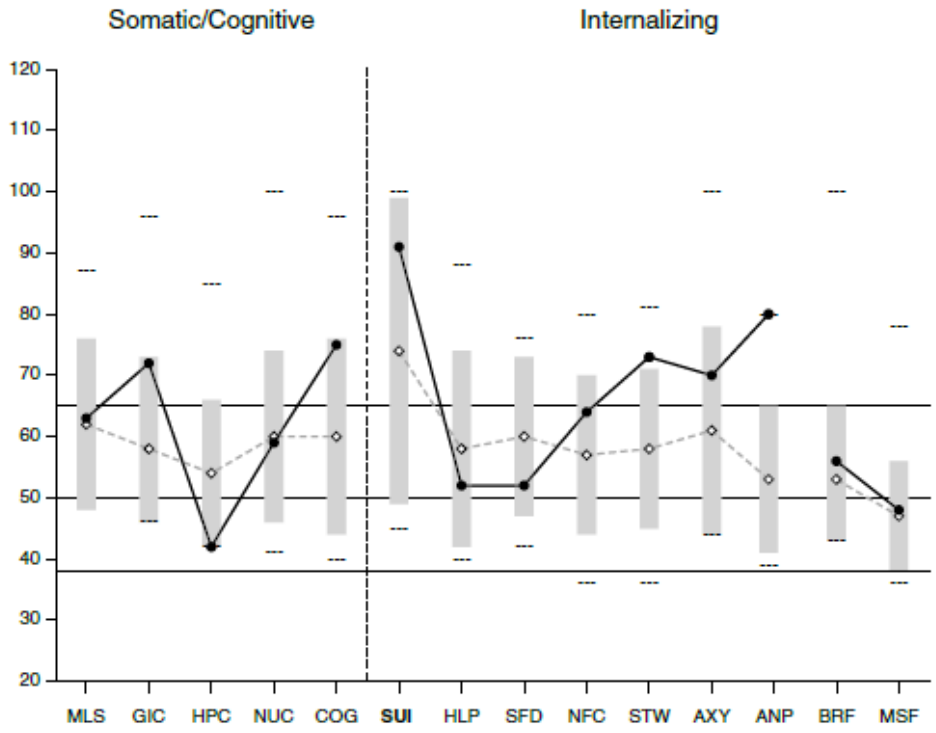
The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

EID Emotional/Internalizing Dysfunction
THD Thought Dysfunction
BXD Behavioral/Externalizing Dysfunction

RCd Demoralization
RC1 Somatic Complaints
RC2 Low Positive Emotions
RC3 Cynicism
RC4 Antisocial Behavior

RC6 Ideas of Persecution
RC7 Dysfunctional Negative Emotions
RC8 Aberrant Experiences
RC9 Hypomanic Activation

MMPI-2-RF Somatic/Cognitive and Internalizing Scales



	MLS	GIC	HPC	NUC	COG	SUI	HLP	SFD	NFC	STW	AXY	ANP	BRF	MSF
Raw Score:	4	2	0	2	6	3	1	1	6	6	2	7	1	3
T Score:	63	72	42	59	75	**91**	52	52	64	73	70	80	56	48
Response %:	100	100	100	100	100	100	100	100	100	100	100	100	100	100

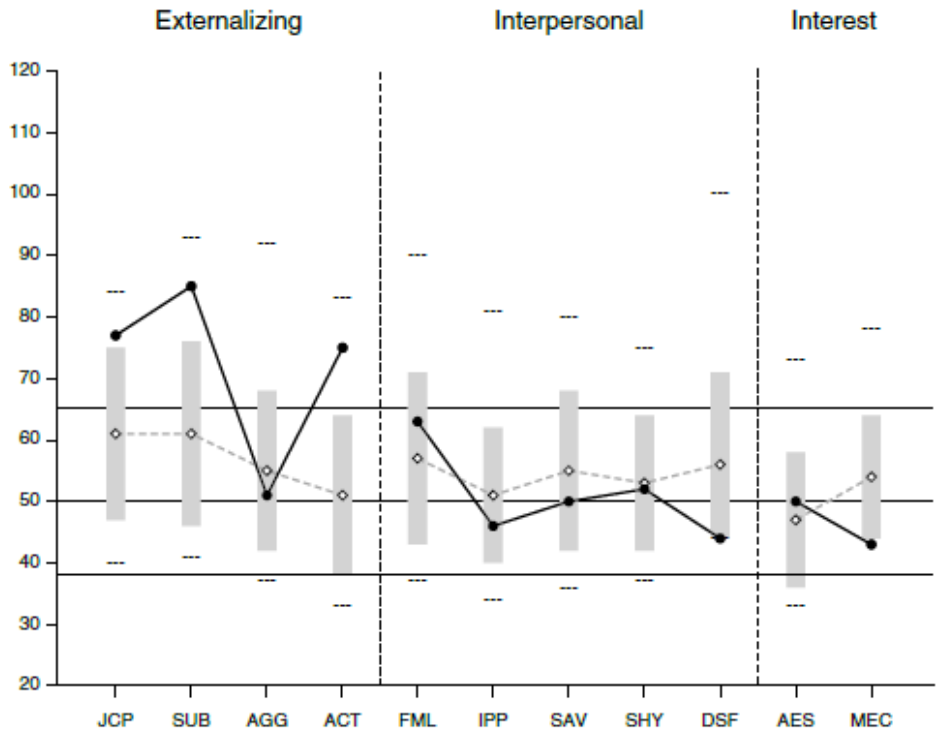
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	62	58	54	60	60	74	58	60	57	58	61	53	53	47
Standard Dev (±1 SD):	14	15	12	14	16	25	16	13	13	13	17	12	12	9
Percent scoring at or below test taker:	59	86	37	58	82	78	51	37	71	94	78	100	76	69

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

MLS	Malaise	SUI	Suicidal/Death Ideation	AXY	Anxiety
GIC	Gastrointestinal Complaints	HLP	Helplessness/Hopelessness	ANP	Anger Proneness
HPC	Head Pain Complaints	SFD	Self-Doubt	BRF	Behavior-Restricting Fears
NUC	Neurological Complaints	NFC	Inefficacy	MSF	Multiple Specific Fears
COG	Cognitive Complaints	STW	Stress/Worry		

MMPI-2-RF Externalizing, Interpersonal, and Interest Scales



	JCP	SUB	AGG	ACT	FML	IPP	SAV	SHY	DSF	AES	MEC
Raw Score:	5	6	2	7	5	3	3	4	0	3	1
T Score:	77	85	51	75	63	46	50	52	44	50	43
Response %:	100	100	100	100	100	100	100	100	100	100	100

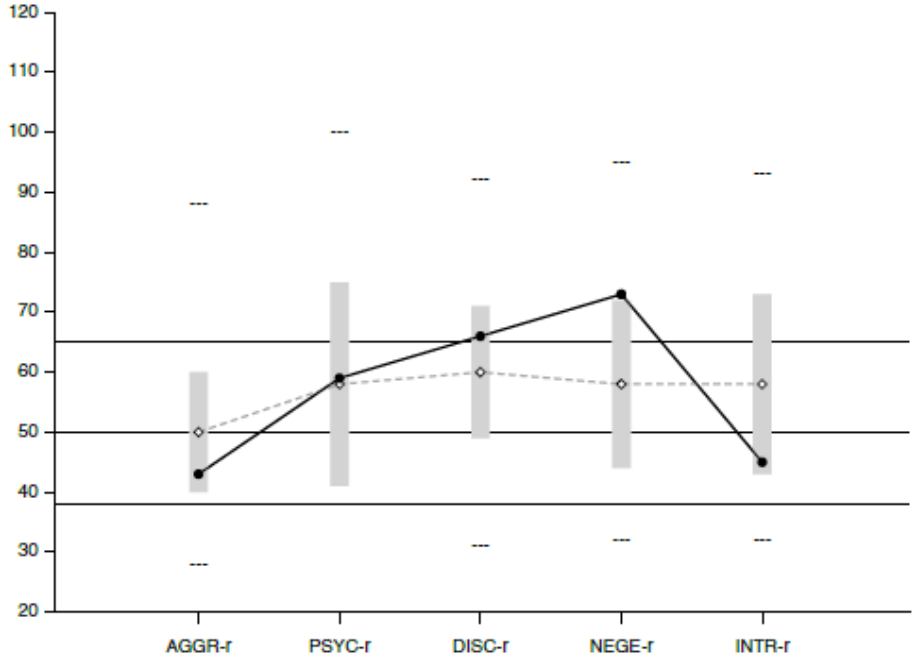
Comparison Group Data: Psychiatric Inpatient, Community Hospital (Men), N = 659

Mean Score (◇---◇):	61	61	55	51	57	51	55	53	56	47	54
Standard Dev (±1 SD):	14	15	13	13	14	11	13	11	15	11	10
Percent scoring at or below test taker:	90	96	53	97	72	46	48	61	50	72	19

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

JCP	Juvenile Conduct Problems	FML	Family Problems	AES	Aesthetic-Literary Interests
SUB	Substance Abuse	IPP	Interpersonal Passivity	MEC	Mechanical-Physical Interests
AGG	Aggression	SAV	Social Avoidance		
ACT	Activation	SHY	Shyness		
		DSF	Disaffiliativeness		

MMPI-2-RF PSY-5 Scales



	AGGR-r	PSYC-r	DISC-r	NEGE-r	INTR-r
Raw Score:	6	4	12	14	4
T Score:	43	59	66	73	45
Response %:	100	100	100	100	100
Comparison Group Data:	Psychiatric Inpatient, Community Hospital (Men), N = 659				
Mean Score (◇---◇):	50	58	60	58	58
Standard Dev (±1 SD):	10	17	11	14	15
Percent scoring at or below test taker:	30	64	75	85	24

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

AGGR-r	Aggressiveness-Revised
PSYC-r	Psychoticism-Revised
DISC-r	Disconstraint-Revised
NEGE-r	Negative Emotionality/Neuroticism-Revised
INTR-r	Introversion/Low Positive Emotionality-Revised

MMPI-2-RF T SCORES (BY DOMAIN)

PROTOCOL VALIDITY

Content Non-Responsiveness	0 CNS	48 VRIN-r	50 TRIN-r				
Over-Reporting	79 F-r	51 Fp-r		83 Fs	86 FBS-r	76 RBS	
Under-Reporting	47 L-r	48 K-r					

SUBSTANTIVE SCALES

Somatic/Cognitive Dysfunction		59 RC1	63 MLS	72 GIC	42 HPC	59 NUC	75 COG	
Emotional Dysfunction	73 EID	77 RCd	91 SUI	52 HLP	52 SFD	64 NFC		
		58 RC2	45 INTR-r					
		65 RC7	73 STW	70 AXY	80 ANP	56 BRF	48 MSF	73 NEGE-r
Thought Dysfunction	57 THD	61 RC6						
		63 RC8						
		59 PSYC-r						
Behavioral Dysfunction	70 BXD	79 RC4	77 JCP	85 SUB				
		53 RC9	51 AGG	75 ACT	43 AGGR-r	66 DISC-r		
Interpersonal Functioning		63 FML	38 RC3	46 IPP	50 SAV	52 SHY	44 DSF	
Interests		50 AES	43 MEC					

Note. This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.

ITEM-LEVEL INFORMATION

Unscorable Responses

The test taker produced scorable responses to all the MMPI-2-RF items.

Critical Responses

Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), 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 individual in the keyed direction (True or False) on a critical scale are listed below if his T score on that scale is 65 or higher. The percentage of the MMPI-2-RF normative sample (NS) and of the Psychiatric Inpatient, Community Hospital (Men) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Suicidal/Death Ideation (SUI, T Score = 91)

93.
164.
334.

Anxiety (AXY, T Score = 70)

228.
289.

Substance Abuse (SUB, T Score = 85)

49.
141.
192.
237.
266.
297.

Special Note:
The content of the test items is included in the actual reports. To protect the integrity of the test, the item content does not appear in this sample report.

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.

CHAPTER 10:
MMPI-2-RF APPRAISALS

MMPI-2-RF Appraisals

- Generally favorable
- Test adopted for routine use in mental health, medical, forensic, and personnel screening evaluations
- Key advantages:
  - Length
  - Modernity
  - String Empirical Foundations

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Graham (2012) and Greene (2011) provide extensive coverage of the MMPI-2-RF
- Provide detailed recommendations for use as well as appraisals of the inventory, including some advantages and disadvantages.
- Advantages include brevity, ease of interpretation, and links to the contemporary literature on personality and psychopathology.

MMPI-2-RF Appraisals

- Both authors mention the loss of information from Clinical Scale code types as a potential disadvantage of the MMPI-2-RF.
- However, Graham (2012) notes that
  - "one could argue that code types evolved largely as a way to deal with the heterogeneity of the Clinical Scales and are not necessary because of the homogeneity of the RC Scales and other MMPI-2-RF scales" (p. 414).

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Both authors also discuss the absence of specific supplementary MMPI-2 measures as disadvantages.
- Graham (2012) lists the Mac-R, Ho and Es scales
- As noted earlier, the MMPI-2-RF Technical Manual reports correlations between MMPI-2 and MMPI-2-RF scales.
- Examination of these statistics indicates that MAC-R is most closely associated with the Higher-Order BXD Scale of the MMPI-2-RF
- RC3 assesses the cynical hostility component of the Ho scale.
- Es is a more heterogeneous measure that does not have a direct parallel in the MMPI-2-RF

MMPI-2-RF Appraisals

- Greene (2011):
  - "The "MMPI-2" in MMPI-2-RF is a misnomer because the only relationship to the MMPI-2 is its use of a subset of the MMPI-2 item pool, its normative group, and similar validity scales. The MMPI-2-RF should not be conceptualized as a revised or restructured form of the MMPI-2, but as a new self-report inventory that chose (sic) to select its items from the MMPI-2 item pool and use its normative group." (p. 22)
- However, naming this instrument, made up exclusively of MMPI-2 items and standardized on the MMPI-2 norms, anything but a restructured version of the MMPI-2 would in fact be misleading.

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Greene (2011):
  - "clinicians who use the MMPI-2-RF should realize that they have forsaken the MMPI-2 and its 70 years of clinical and research history, and they are learning a new inventory" (p. 22).
- Nonetheless, he provides detailed recommendations on how to use the MMPI-2-RF, which span roughly one-fourth of his book and include several case studies.
- Greene has also developed a commercially available computer-based interpretive report for the MMPI-2-RF.
- It can, therefore, reasonably be inferred that Greene does not view his expressed concerns as cause for not using the test.

MMPI-2-RF Appraisals

- Butcher (2011) provides an exclusively negative appraisal of the MMPI-2-RF and recommends against its use.
- Much of Butcher's appraisal consists of repetition of criticisms of the RC Scales without consideration of the substance of published responses to these criticisms (Tellegen et al., 2006, 2009).
- Butcher's claim that the RC Scales "underpathologize" is contradicted by data (Sellbom, et al., 2006, Tellegen et al., 2006)

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Butcher (2011) also lists some new concerns, including:
  - The relatively low reliability estimates for some Specific Problems Scales
    - However, as discussed earlier, the reliability estimates reported in the Technical Manual need to be considered in the context of the associated measurement error statistics, which are also reported
  - "the majority of the scales incorporated in the MMPI-2-RF are insufficiently validated to provide the practitioner with confidence in assessment" (p. 189)
    - This is belied by the unparalleled quantity and quality of external correlate data reported in the Technical Manual (discussed earlier).

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MMPI-2-RF Appraisals

- Butcher (2011) expresses concern about the loss of items related to work adjustment and treatment readiness that resulted from pruning the item pool from 567 to 338 statements.
  - The items alluded to here are scored on two of the MMPI-2 Content Scales, Work Interference (WRK) and Negative Treatment Indicators (TRT).
  - Data reported in the Technical Manual indicate that both these scales are oversaturated with demoralization variance and their distinctive features are assessed on the MMPI-2-RF with the Inefficacy (NFC) and Helplessness/Hopelessness (HLP) Scales, respectively.
  - Treatment considerations are included in the interpretive recommendations for most of the MMPI-2-RF substantive scales.

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Butcher (2011) remarks that "it is likely that the interpretations and conclusions drawn from the MMPI-2-RF will differ substantially from an MMPI-2 interpretation" (p. 190) and expresses concern that this may create confusion.
  - However, because the two MMPI versions are scored from the test-taker's responses to the same set of items, it is unlikely that two conflicting clinical pictures will emerge.
  - The more likely outcome is that the picture portrayed by the MMPI-2-RF may be more readily and clearly discerned.
  - Confusion can be avoided by being clear about which version of the MMPI was used in a given assessment.

MMPI-2-RF Appraisals

- Elsewhere, Butcher (2010) is critical of use of non-gendered norms with the MMPI-2-RF, stating:

  Unlike the original MMPI and MMPI-2, in which separate gender norms were provided, the MMPI-2-RF authors combined genders into one comparison sample. This situation may result in different standards being applied for men and women in assessment and prediction. Further study of this potential bias needs to be conducted. However, the MMPI-2-RF manuals do not provide the information necessary for exploring this question because raw score data by gender are not reported. (p. 14)

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- This criticism reflects a fundamental misunderstanding of group-specific norms.
- Contrary to Butcher's assertion, gender-based norms create different standards for men and women, which can mask meaningful gender differences (cf., Reynolds & Kamphaus, 2002, 2004; Reynolds & Livingston, 2012).
- Non-gendered norms apply the same standard to men and women's test scores and reflect rather than mask actual gender differences.

MMPI-2-RF Appraisals

- Butcher's (2010) assertion that the MMPI-2-RF manuals do not provide information necessary to explore this question is also incorrect.
- As noted earlier, means and standard deviations of scores on the 51 MMPI-2-RF scales are reported in the Technical Manual by gender for a wide range of samples, including the normative sample.
- Gender-based norms would have gender differences reflected in these data by setting the mean T score for each gender at 50.
- Moreover, inclusion of extensive, gender-specific descriptive data in the Technical Manual allows MMPI-2-RF users to compare a test-taker's results with samples of men and women tested in a wide range of mental health, medical, forensic, personnel screening, and non-clinical settings.

INTERPRETING THE MMPI 2 RF

MMPI-2-RF Appraisals

- Nichols (2011) mainly repeats Butcher's (2010, 2011) criticisms, focusing mostly on his own previous (Nichols, 2006) critique of the RC scales.
- Detailed responses to Nichols's earlier RC Scale critiques are provided by Tellegen and colleagues (2006, 2009).

For additional information, please reference:

Ben-Porath, Y.S. (2012). *Interpreting the MMPI-2-RF*. Minneapolis: University of Minnesota Press.