

25 HISTORICAL HIGHLIGHTS: ASSESSING DEFENSIVENESS, CLOSED-MINDEDNESS AND DOGMATISM WITH THE MMPI/MMPI-2¹

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Evaluations of clients in psychological assessments are often influenced by an individual's reluctance or inability to provide personal information to others or the presence of an effort to control others. The MMPI and MMPI-2 provide several means of evaluating test-defensiveness or uncooperative responding. The following research studies highlight special contributions that were made to assure that the client's approach to item responding is valid and results in providing appropriate, reliable, and valid information regarding symptoms and relevant to the psychological assessment. Major research studies of the MMPI/MMPI-2 in various settings are highlighted and their findings/implications are summarized.

- 1943 Hathaway & McKinley introduced the Minnesota Multiphasic Personality Inventory as an empirically based self-report instrument that could assess clinical symptoms by differentiating people with mental health problems from normal individuals. Several measures were developed that address client's defensiveness or effort to control the manner in which they present themselves on tests. The L or Lie scale, F Scale and Cannot Say Score (?) were prominent validity measures.
- 1946 One of the most effective and most useful scales that were developed to assess introversion and extroversion for the MMPI was the Social Introversion/Extraversion or Si scale by Drake. This scale was empirically developed by using MMPI items that clearly discriminated college students who were high on the TSE (Thinking –Social

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Emotional Introversion Inventory) versus those who were low on the scale. Scores on the Si scale have shown high stability over long periods of time, a personality characteristic that is valuable to consider in personality assessment. High scorers on Si scale address introversion and social withdrawal while low scores (45 T or less) tend reflect extroversion and socially effective and dominant behavior in social relationships.

- 1946 Meehl & Hathaway developed the K scale as a suppressor variable in the Minnesota Multiphasic Personality Inventory in presenting information about themselves. The susceptibility of structured personality inventories to outright deception or unconscious self-deception, etc., have made their validity questionable. Yet efforts have been made in developing measures that can manipulate or modify measures stressing statistical interrelationships of item responses much more than the relation of the latter to external non-test criteria. In an attempt toward finding answers for both of these faults the "final result of many efforts to derive special scales for measuring various attitudes in the taking of the Minnesota Multiphasic Inventory is presented, with some indications of its validity. The relationship of the K scale to other variables is used as a basis for discussing certain general problems in the theory of personality measurements and the tendency to be defensive in sharing information.
- 1951 Gough, McClosky & Meehl developed the dominance scale (Do scale) which addresses: The dominant person tends to be the "stronger" in face-to-face personal situations, for instance, with friends, salespeople, etc. They are able to influence others, to gain their automatic respect, and if necessary to control them. They are not readily intimidated or defeated, and his own feelings in most face-to-face situations seem to be feelings of safety, security, personal tightness, and self-confidence, They are often described by others as "forceful", "masterful", "strong", "confident", "authoritative", and "sure of himself".
- 1953 Barron developed an MMPI scale (Ego Strength or Es) to predict responses to psychotherapy. Analyses of its content and its correlations with other measures suggested that the scale was a measure of "ego-strength." Subsequently the scale has been widely validated as a predictor that estimates personal adaptability and resourcefulness in dealing with others.
- 1953 Gallagher evaluated the utility of the MMPI in detecting symptom change following treatment. He found that there were significant differences in reported problems (particularly discomfort scales such as D, Pt and Hs) between the pre-treatment MMPI scores and post-treatment scores. Symptom scales tended to be lower on retest. The only scales that showed a tendency to be higher on retest were the Hy, Pd and Ma scales that were considered to reflect persistent character problems.
- 1954 Drake conducted a large-scale study in which the MMPI profiles of clients in counseling were evaluated. He found that those counseling cases found to be difficult to deal with because they were aggressive or opinionated were characterized by having MMPI profiles with scales Pd and Ma elevated. The group of shy clients were best characterized as having high scores on the Pt or Si scales.

- 1957 Hanley conducted a study for testing the usefulness of a method for selection of items measuring test-taking defensiveness and plus-getting. The scale in which the social desirability of items is uncorrelated with their probability of endorsement can serve as a validating measure when the items are keyed in terms of the socially desirable response. A limited application to the MMPI demonstrated that a 26-item experimental scale is similar to the K scale with respect to correlations with the main diagnostic scales of the inventory. Significant correlations were found with other measures of defensiveness. When the experimental scale was corrected for the acquiescence response set, it was found that both acquiescence and defensiveness could be measured by appropriate keying of the same set of items. Correlations of these two keys with other MMPI scales indicated that both defensiveness and acquiescence contribute to the variance on the diagnostic measures.
- 1958 Test defensiveness in personnel screening was highlighted by Fulkerson, Sells, and Raynor (1958). They reported that interpretations of the MMPI norms required supplementation or modification in order to better assess the personality of military pilots who appeared more defensive (K), more prone to conversion symptoms (Hy), more manic ((Ma), and less introverted (Si).
- 1967 Lebovits and Ostfeld examined 1805 Ss' scores on the MMPI and a sociological questionnaire to determine how the MMPI scores vary as a function of education and defensiveness. The higher the educational level, the greater was the frequency of high K scores. With K scores held constant, high education was associated with higher Mf scores and low Lie- and F-scale scores. People with more education more frequently had highpoint scales of depression, hysteria, and paranoia. The results indicate that defensiveness and educational achievement influence the level of the MMPI scores and the nature of the highpoint scales. They suggest that educational achievement and defensiveness should be controlled whenever groups are compared; that defensiveness should be treated as a personality characteristic and as a response set; and that more sophisticated statistics be explored in making a fuller use of personality tests.
- 1969 Kirtley & Harkless conducted a study to examine the personality characteristics underlying dogmatism. They studied 61 undergraduate psychology students using the Troidahl-Powell 20-item form of the Dogmatism scale along with the MMPI, the Politico-economic Conservatism scale (Form 60), and an adaptation of the Bogardus Social Distance scale. Dogmatism was found to be positively related to conservatism and rejection of minorities and groups associated with unconventionality and social change. The Troidahl-Powell 20-item scale, like Rokeach's Form E, appears to be a better measure of rightist than leftist authoritarianism. Rokeach's suggestion that a neurotic factor may underlie leftist dogmatism, as opposed to a psychopathic one in the case of rightist dogmatism, was not supported, as the more dogmatic Ss, also the more conservative, showed significant tendencies in the direction of neurosis and psychosis but none toward psychopathy. Also, the less dogmatic Ss were inclined to deny possession of unfavorable personality characteristics. Thus, low scores on the Dogmatism scale may indicate a defensive factor as well as genuine "open-mindedness."
- 1971 Houston pointed out that defensiveness may refer to verbal denial of anxiety or anxiety-reducing maneuvers. Whether a measure of defensiveness will improve prediction of behavior from an anxiety scale depends on which aspect of defensiveness the scale measures and the situation in

which people are observed. Adjustment of Ma Scale scores for Denial scale scores improved prediction of digits-backward performance in a nonstress condition, but decreased prediction of task performance in a stress condition, with 48 male undergraduates.

- 1971 Adams hypothesized that a warmer introduction to the MMPI would reduce defensiveness as measured by the K and F-K scores and permit the revelation of more psychiatric symptoms. Over a 7-mo period the MMPI with either a warm or cold introduction was administered to a total of 61 mothers and 47 fathers of children being evaluated in a child psychiatric clinic. The K scores were significantly higher and the F-K scores significantly lower for the cold-form group. Mothers who received the warm form scored higher on the F scale, while fathers did not differ across forms. It is concluded that, while an increase in honesty resulted from the manipulation of the forms, there was little evidence to indicate that there was also an increase in the acknowledgment of psychiatric problems. It is suggested that high K and low F-K scores, rather than indicating the covering up of symptoms, are an assertion of psychological health
- 1971 Stefic and Lorr attempted (a) to determine what factors account for relationships among items representative of 5 well-known measures of defensiveness, and (b) to relate the factors found to homogeneous measures of psychopathology and extroversion-introversion. A 246-item inventory was administered to 217 undergraduate and graduate students. An initial analysis of the 110 defensive items yielded 8 factors of which the 1st, admission of common frailties, was defined by items from the Lie, the Good Impression, the Marlowe-Crowne, the K, and the Cofer malingering scales. Items best defining 6 of the defensive factors, 6 psychopathology factors, and an extroversion scale were grouped into homogeneous subsets. The 2 main factors yielded by the factor analysis of the subtest correlations were interpreted as dimensions of extra- and intro-punitiveness.
- 1982 Morelli and Andrews studied the construct of cognitive irrationality as related to defensiveness as measured by the Defense Mechanism Inventory of Gleser and Ihilevich. Rationality was positively related to the principalization and reversal defenses. Catastrophizing subjects employed the defenses of turning against objects and projection; guilty subjects employed the reversal defense; and subjects prone to inertia and avoidance, and projected misfortune employed the defense of turning against objects. Multiple regression analyses supported the correlations. The theoretical and clinical relevance of cognitive irrationality and defense styles is discussed.
- 1982 Audubon & Kirwin conducted a study using the MMPI and 16 PF to evaluate defensiveness in a forensic sample. They administered the tests to 45 forensic patients and scores on five derived measures of defensiveness were computed. The 10 highest and 10 lowest scoring subjects were assigned to either a high or low defensiveness group and their responses analyzed with regard to the Schizophrenia, Paranoia, Psychopathic Deviate and Hostility clinical scales and sub-scales of the MMPI according to past or present items. Results confirm that high defensiveness subjects are selectively and cautiously interpreting items so as to admit to significantly less overall pathology and relatively less present pathology than low defensiveness subjects. This finding represents a consistent strategy of defensiveness rather than an artifact of false response bias. This study has implications for personality assessment in Forensic Psychology and the potential of trend analysis for the prediction of future dangerous behavior in a forensic patient population.

- 1989 The MMPI-2 Manual (p. 14) indicates that the Cannot Say Score (?) being elevated can indicate that clients avoid answering items they feel that are too revealing about their problems (Butcher, Dahlstrom et al., 1989)
- 1995 Butcher and Han developed an empirical scale to assess test takers, such as job applicants, who proclaim extreme virtue and absence of psychopathology on the MMPI-2 item pool. The S-scale differentiated high virtue-claiming individuals (airline flight crew applicants) from a general nonclinical sample—the MMPI-2 normative sample. The items that differentiated a group of people with a clear, strong motivation to show themselves extremely well adjusted from people in general would reflect the tendency to portray oneself in a superlative manner. The goal was to develop a scale of superlative claim assertions that could summarize the attempt to proclaim overly positive self-presentation and would not be as susceptible to conscious distortion (as scale L). Further analyses assuring scale homogeneity were conducted. Subscales were developed using item factor analysis of the full scale to provide more specific information about high scoring clients. External correlate data for the S scale were also provided.
- 1997 The development and subsequent validation of the test-retest method under special instructions for administering the MMPI-2 to lower test defensiveness and obtain a higher percentage of valid protocols in personnel screening (Butcher, Moffitt, Rouse, & Holden, 1997; Butcher, Gucker & Hellervik, 2009; Cigrang, & Staal, 2001).
- 1998 Butcher, Rouse and Perry conducted an empirical evaluation of patient-related factors in treatment resistance. MMPI-2 variables that can affect a client's willingness to implement behavioral changes were described.
- 2000 Joiner, Schmidt, Lerew, Cook, Gencoz & Gencoz conducted a study examining defense test taking style on measures of depression and anxiety. They used a sample of Air Force cadets facing the prospect of basic training (N = 1,190; 1,005 men and 185 women), and examined the influence of a defensive test-taking style on measures of depressive and anxious symptoms. Participants completed the Beck Depression Inventory (Beck & Steer, 1987) and the Beck Anxiety Inventory (Beck, Epstein, Brown, & Steer, 1988), as well as the MMPI (Hathaway & McKinley, 1943) L scale. Results supported hypotheses that defensiveness would affect a self-report measure of depression but not a self-report measure of anxiety and would do so more among men than women. Applied implications of the results are discussed.
- 2002 Wise found that the MMPI-2 validity scales were correlated with MCMI-II personality disorder scales in a study that examined relationships between response styles and personality disorders in a sample of 84 criminal defendants. 14 MMPI-2 validity scales were significantly correlated with 13 personality disorders. All of the personality disorder scales were significantly correlated with at least one validity measure and 11 of 13 personality disorder scales were significantly correlated with two or more MMPI-2 validity scales. While a personality disorder diagnosis may have a general effect on validity scales, relationships theoretically consistent with a given personality disorder were also found. This means that response set appears to be a manifestation of personality, and as such, examiners should expect symptom amplification or minimization or

inconsistent responses, based on an individual's personality. Subsequently, forensic examiners are encouraged to evaluate the relationships between MCMI–II personality disorders and MMPI–2 validity scales to avoid misjudging MMPI–2 profiles as invalid when they accurately reflect manifestations of personality.

- 2005 Subotnik, Nuechterlein and colleagues examined whether deficits in attention and perceptual encoding as well as psychological defensiveness were associated with impaired awareness of disorder in schizophrenia. The Scale for Unawareness of Mental Disorder (SUMD) was administered to 52 outpatients with a recent onset of schizophrenia approximately 1–2 months following hospital discharge. Two versions of the Continuous Performance Test (CPT) were used to measure attentional impairment—the Degraded Stimulus CPT (DS-CPT) and a memory-load version (3-7 CPT). Three scales from the Minnesota Multiphasic Personality Inventory were used as indicators of psychological defensiveness: Scales L (Lie), K (Correction), and R (Repression). The Classification and Regression Tree (CART) program, a nonparametric statistical method, was used to identify relationships among multiple predictor variables and to provide optimal splitting scores for each predictor variable. Different combinations of poor target discrimination (d') on the 3-7 CPT and a cautious response style on the DS-CPT were associated with the three levels of overall unawareness of having a mental disorder. For nonpsychotic patients, better target discrimination (d') on the 3-7 CPT tended to be associated with better awareness of having a mental disorder. In contrast, unawareness among the patients who were psychotic at the time of the SUMD administration was not discriminated by attentional measures, but was associated with a combination of two measures of psychological defensiveness from the MMPI reflecting guardedness, psychological suppression, attempting to present oneself in a socially desirable light, and social acquiescence. Generally similar associations were found for two other dimensions of poor insight: unawareness of the beneficial effects of antipsychotic medication, and inability to attribute unusual thoughts and hallucinatory experiences to a mental disorder.
- 2008 Gordon, Stoffey & Bottinelli studied the involvement of primitive defenses in Parental Alienation Syndrome (PAS) by collecting 158 MMPI-2s from court ordered custody evaluations from 7 forensic psychology practices; 76 were PAS cases and 82 were custody cases without PAS (controls). They used two MMPI-2 indexes to measure primitive defenses: $L + K - F$ and $(L + Pa + Sc) - (Hy + Pt)$. They found that mothers and fathers who were alienators had higher (clinical range) scores indicating primitive defenses such as splitting and projective identification, than control mothers and fathers (normal range scores) in both our indexes.
- 2010 Walfish studied the possibility of professionals avoiding negative impact of their license to practice when they are evaluated. Professionals presenting for an intensive fitness for duty multidisciplinary evaluation might have a motivation to minimize emotional difficulties in a psychological evaluation. This study examines the incidence of “fake-good” Minnesota Multiphasic Personality Inventory-2 (MMPI-2) profiles in those being evaluated and changes in psychometric test scores when extremely defensive patients are asked to repeat the testing with specialized instructions. As part of the evaluation process, patients completed an MMPI-2, as well as other psychometric instruments. The validity of each MMPI-2 profile was evaluated. Patients who produced an invalid test profile due to hyperdefensiveness were provided feedback on their defensiveness and asked to be more open and honest in a repeat testing. More than half (59%) of the patients produced invalid test profiles. Being given feedback and a request for openness and honesty resulted in 90% of valid profiles in the repeat testing. On the second testing, there were significant differences on 6 of the 13 MMPI-2 scales, as well as on each of the separate measures of depression, anxiety, and anger. It appears to be important to include a psychometric measure that includes a validity scale in the evaluation process of professionals because the majority

produced invalid MMPI-2 profiles. It is recommended that patients who are defensive in their testing be asked to repeat the test battery to gain a more accurate clinical picture of the individual.

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