

of MMPI°-2 Assessment

Second Edition

- Complete coverage of administration, scoring, interpretation, and reporting
- Expert advice on avoiding common pitfalls
- Conveniently formatted for rapid reference

David S. Nichols



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Alan S. Kaufman & Nadeen L. Kaufman, Series Editors

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1. Minnesota Mutiphasic Personality Inventory. I. Title: Essentials of Minnesota Multiphasic Personality Inventory-Two Assessment—2. II. Title.

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To the memory of my beloved parents, Ambrose Reuben Nichols, Jr. (1914-2000) and Barbara Adele Seward Nichols (1913-2006), and to the future of my beloved Godson, Benjamin David Bowman (1992-). In each, the luck of a lifetime.

Series Preface

In the Essentials of Psychological Assessment series, we have attempted to provide readers with books that will deliver key practical information in the most efficient and accessible style. The series features instruments in a variety of domains, such as cognition, personality, education, and neuropsychology. For experienced clinicians, books in the series will offer a concise yet thorough way to master utilization of the continuously evolving supply of new and revised instruments, as well as a convenient method for keeping up-to-date on the tried-and-true measures. Novices will find here a prioritized assembly of all the information and techniques that must be readily known to begin the complicated process of individual psychological diagnosis.

Wherever feasible, visual shortcuts to highlight key points are utilized alongside systematic, step-by-step guidelines. Chapters are focused and succinct. Topics are targeted for an easy understanding of the essentials of administration, scoring, interpretation, and clinical application. Theory and research are continually woven into the fabric of each book, but always to enhance clinical inference, never to sidetrack or overwhelm. We have long been advocates of "intelligent" notion that a profile testing—the of test scores is meaningless unless it is brought to life by the clinical observations and astute detective work of knowledgeable examiners. Test profiles must be used to make a difference in the child's or adult's life, or why bother to test? We want this series to help our readers become the best intelligent testers they can be.

In Essentials of MMPI-2 Assessment, 2nd Edition, the author presents a range of basic information that will enable students and psychologists wishing to renew their acquaintance with this test to establish a firm foundation in

its applications and interpretation. A complete range of MMPI-2 scales, both traditional and more recent, the relationships among them, and the test patterns they create, are described in sufficient detail to support initial expertise. This text also provides a level of depth suitable for experienced clinicians to extend and strengthen their understanding of the test's scales and patterns, and to become familiar with those developments that have come about since the original edition was released a decade ago. More than one-third of the references are new to this edition.

No guide to the MMPI-2 is sufficiently comprehensive to stand alone; each must adhere to one of several possible whether clinical, research, psychometric, medical, forensic, or another. Although matters related to the test's psychometrics and research findings are not neglected, the predominant emphasis here is abnormal clinical so as to maintain maximal relevance to the tasks the clinical psychologist is routinely called upon to perform: personality assessment, psychodiagnosis, and treatment planning for persons with mental disorders. Accordingly, the descriptive slant given to the test's scales and patterns is one the author has sought to tie as closely as possible to abnormal psychology/psychiatry. As such. the incorporates a great deal of the clinical lore that has grown up around the MMPI/MMPI-2 over the past 70 years, some from the author's 40 years of direct experience and consultation using the test with a very wide range of psychiatric patients and clinical problems. This text is intended to assist clinicians in approaching the task of MMPI-2 interpretation with a sound appreciation of its limits and complexities, but also with a secure confidence that they can successfully apply the MMPI-2 in the service of understanding patients, guiding their care, and helping them achieve better and more fulfilling lives.

Alan S. Kaufman, PhD, and Nadeen L. Kaufman, EdD, Series Editors Yale University School of Medicine

Acknowledgments

The occasion of the second edition of this book affords me the pleasure of acknowledging my gratitude to my mentors in the MMPI/MMPI-2 over the past 35 years: Jim Butcher, Alex Caldwell, Bob Carson, Bob Colligan, Grant and Leona Dahlstrom, Joe Finney, Irv Gottesman, Jack Graham, Roger Greene, Phil Marks, Paul Meehl, George Ritz, and Auke Tellegen. All of them have enriched my view of this instrument, and none would be fully pleased with the presentation I give here. Nevertheless, I could not be more thankful for their efforts in trying to educate me. I am even more indebted to those I cannot acknowledge by name, the patients whose lives touched mine in the course of my work at Oregon State Hospital, who completed the MMPI/MMPI-2 and sat with me and taught me, about themselves and about this test.

I gratefully acknowledge the specific contributions of Roger Greene, my beloved friend and research partner of 30 years. At every turn and in every way within his power, Roger has lent his active and relentlessly generous support to the exploration of the questions that the MMPI and MMPI-2 have brought my way. He provided the zero-order correlations drawn from Alex Caldwell's clinical file of 52,543 MMPI-2 protocols that occur throughout the book. An equally warm acknowledgment is due Alex, another generous friend and beloved colleague who, in Westwood, Los Angeles, in the Spring of 1974, extended his hand to an ignorant but student of the MMPI, thereby beginning conversation that continues to this day, and continues to be peppered with the lively spice of argument. Whatever elements of this book prove lucky enough to stand the test of time can be traced to the labor and devotion of these two dear friends.

Early drafts of Chapters 1 and 6 benefited greatly from both stylistic and substantive review by Jane Rosen who, beset by a crush of obligations to family, graduate school, and work, nevertheless undertook this generous act of friendship.

My heartfelt thanks are also due to Tracey Belmont, my original editor at Wiley. The benefit of her soft touch, encouragement, flexibility, and patience kept me going when my will and confidence flagged, and her dedication to improving my prose at every turn continues in this revision. Both I and the readers are much in her debt.

Chapter One

History and Development

The road that led to the development of the Minnesota Multiphasic Personality Inventory (MMPI) was circuitous, its course passing by several notable psychometric failures and surprising success in the area of occupational achievement of Starke psvchology. The Hathaway, a physiological psychologist, and J. Charnley McKinley, a neuropsychiatrist, rested on 30 years of experience with self-report questionnaires created to discern personality features. The need to evaluate the fitness of military personnel to serve in the Armed Forces during World War I was a major stimulus to the development of personality questionnaires. The best-known example of these was the Woodworth Personal Data Sheet (1920), which incorporated its author's *Psychoneurotic Tendencies*, a scale developed three years earlier in an effort to assess the vulnerability of military personnel to shell shock, battle fatigue, or other emotional instability. The test was a qualified success, presumably, in part, because prospective soldiers who feared combat or otherwise considered themselves in need of evaluation were more than willing to acknowledge their attitudes on the test (Hathaway, 1965).

The *Psychoneurotic Tendencies* scale was adapted as one of the scales of the Bernreuter Personality Inventory (1933), which was to become hugely popular despite telling research failures that appeared almost immediately following its publication. Landis and Katz (1934) found, for example, that its scale for neuroticism was unable to discriminate neurotics from psychotics. Moreover, some of

the scale's items were endorsed by members of a normal sample more frequently than by neurotics. The Achilles' heel of the Bernreuter lay in the strategy of its construction. The composition of the test items was guided by rational considerations applied to textbooks or case histories on the assumption that neurotics, for example, would respond to the items as expert opinion suggested they should. The work of Landis and Katz (1934) and others showed that neurotics, among others, could be somewhat perverse in this regard.

The Humm-Wadsworth Temperament Scale (1935) was the first personality questionnaire to use the actual responses of psychiatric patients to determine the direction in which items should be scored and their suitability for scale development. It was also the first inventory to attempt to model a specific theory of personality, that of psychiatrist Aaron Rosanoff (1921). The Humm-Wadsworth contained 318 items and provided scores for seven scales: Normal, Manic, Depressive, Autistic, Paranoid, Hvsteroid. Epileptoid. The item assignments for each scale were based the difference between the item's frequency of endorsement among a group of patients judged high on the trait and a comparison group of normals. For whatever reason, the test didn't catch on in clinical settings, but it became popular for use in industry (Goldberg, 1971). The method of contrasted groups was not discovered by Humm and Wadsworth. It had been known since at least the early 1920s and had been used to conspicuous advantage by E.K. Strong in the development of the Strong Vocational Interest Blank (SVIB; 1927). Strong had built his interest inventory by requiring that the items on his scales discriminate between occupational groups (e.g., lawyers) and "men-ingeneral."

As Hathaway began to develop the MMPI, he was aware of the criticisms of the Bernreuter and of the rational approach to inventory construction in general. He also knew both of the methods used to develop the SVIB and of the success of this inventory in practice. Finally, Hathaway knew of the Humm-Wadsworth, which figured in his first publication in the field of clinical psychology (1939), and from which he borrowed about one-quarter of his MMPI items.

It might be supposed that the method of contrasted groups appealed only to Hathaway's scientific scruples, but this is far from the case. Hathaway was a tinkerer, an inventor, and a builder of gadgetry and apparatus. He was by temperament a thoroughgoing pragmatist with a deep distrust of theory and an abiding belief in practical experience. The method of contrasted groups provided Hathaway with a practical means of avoiding theory and sidestepping rational or intuitive guidance in the selection of the items for the MMPI clinical scales. Hathaway did not pretend to know how different kinds of patients would respond to his items. The method of contrasted groups allowed him a satisfactory way of finding out: It allowed him to ask them.

There was another advantage to this method that was not wasted on Hathaway. He knew that the previous rationally developed inventories had failed at least in part because their developers' attention had wandered from the central question of *validity*. By relying on the method of contrasted groups, Hathaway required items to surmount a validity hurdle from the outset: Each item had to demonstrate construct relevant variance by concretely discriminating between groups. This was no guarantee that the item would survive subsequent challenges to its validity. For example, it could fail on cross-validation to discriminate the same group of criterion cases from a different group of normal controls; or a similar but separately constituted group of criterion cases from the same group of normal controls; or in comparisons in which both the criterion cases and normal

controls involved previously untested subjects. The advantage of the method was that the items exposed to such subsequent challenges had achieved at least some initial, concrete, discriminative advantage, a claim no rationally derived item could make.

Hathaway intended the MMPI to achieve a "sampling of behavior of significance to the psychiatrist," and this aim determined the range of clinical scales to be developed for the inventory. From an initial pool of more than 1,000 items drawn from psychiatric textbooks, guides for the mental examination, and previously published tests, status Hathaway and McKinley winnowed the pool to 504 items divided into 26 content areas. These included items related to general medical and neurological symptoms, political and social attitudes, affective and cognitive symptoms, and fears and obsessions; items implicating family, educational, and occupational experience; and a set of items to reveal an overly virtuous self-presentation on the inventory. An additional 55 items thought to be related to masculinityfemininity were later added, and 9 items were subsequently deleted to achieve the final pool of 550 items.

The item format chosen was the first-person declarative sentence, written with simplified wording based on contemporary word-frequency tables. Brevity, clarity, and simplicity were occasionally given precedence over grammatical precision. Common English slang and idioms were used, but esoteric or specialized language was avoided. Responses were limited to *True*, *False*, and *Cannot Say* (?).

The group of normals selected to contrast with the pathological criterion groups were 724 University of Minnesota hospital and outpatient clinic visitors between the ages of 16 and 65 (hereafter referred to as the "Minnesota Normals"). Each affirmed that he or she was not currently under a physician's care for the treatment of any

illness. The demographics of this group of normals corresponded well to 1930 census values for Minnesota regarding age, sex, and marital status (Colligan, Osborne, Swenson, & Offord, 1983). "In 1940, such a Minnesota normal adult was about 35 years old, was married, lived in a small town or rural area, had eight years of general schooling, and worked at a skilled or semi-skilled trade (or was married to a man with such an occupational level)," (Dahlstrom, Welsh, and Dahlstrom, 1972, p. 8).

First published in 1942, the MMPI included scales for Hypochondriasis (Hs), Depression (D), Hysteria (Hv). Psychopathic Deviate (Pd), Masculinity-Femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), and Schizophrenia (Sc), and was an immediate success. By the end of April 1943, 230 copies had been sold for use in clinics, correctional facilities, corporations, and universities, generating enough revenue to more than cover the costs of initial publication. The Psychological Corporation, which had turned down the test when it was first submitted, became its licensed distributor in 1943, by which time the ninth and last of the clinical scales, *Hypomania* (Ma), was ready to be included in the revised Manual (Hathaway & McKinley, 1943) and test materials. A manual supplement introducing a booklet form of the test as an alternative to the original box form was published in 1946. This supplement also introduced the K scale—which thereafter took its place next to F on the standard profile form—as well as the practice of adding fractions of K to suppress some of the scale score variances related to response style. The MMPI arrived in its final form in the 1951 Manual with the addition of the Social Introversion scale (Si), the last of the standard clinical scales.

Rapid Reference 1.1

Summary of MMPI-2 Standard Validity and Clinical Scales

Validity Scales

L Lie. Assesses naive attempts to place oneself in a morally and culturally favorable light by denying moral imperfections.

F Infrequency. Assesses the tendency to claim highly unusual attitudes and behaviors as a function of severe psychopathology; a subject's seeking to place himself or herself in an unfavorable light; or a subject's difficulties completing the inventory (e.g., reading problems or random or careless responding).

K Correction. Assesses the tendency to control and limit the disclosure of distress, discomfort, and problems relating to others. Fractions of K are added as a correction to Scales 1, 4, 7, 8, and 9 to discourage false-negative/false-positive scores on these scales.

Clinical Scales

- **1.** Hypochondriasis (Hs). Measures the tendency to manifest physical symptoms as an expression of emotional discomfort, to be preoccupied with one's health, and to reject nonmedical (i.e., psychological) explanations for such symptoms.
- **2.** Depression (D). Measures aspects of symptomatic depression: dysphoria, distress, pessimism, low morale, inhibition, intropunitiveness, physical discomfort and vegetative symptoms, problems in thinking, and social vulnerability.
- **3.** Hysteria (Hy). Measures the tendency to develop physical symptoms under stress, to experience pain, and to deny social friction or discord with others.
- **4.** Psychopathic Deviate (Pd). Measures alienation, social disinhibition, and the tendency to come into conflict with family, authorities, and others through rebellion, exploitation, misconduct, poorly developed conscience, and the lack of internalized moral standards.
- **5.** *Masculinity-Femininity* (*Mf*). Measures broad patterns of interests, activities, attitudes, and sentiments that tend to follow gender stereotypes.
- **6.** Paranoia (Pa). Measures personal/moral rigidity, interpersonal sensitivity, resentment, and ideas of being misunderstood, mistreated, persecuted, or controlled by others, and the tendency to construe the actions, intentions, and motives of others as unfair, degrading, or hostile.
- **7.** Psychasthenia (Pt). Measures the tendency to express stresses through tension, anxiety, apprehensiveness, worry, phobias, obsessions, rumination, compulsions, and fears of losing control, with willful and inflexible efforts to control such symptoms.
- **8.** Schizophrenia (Sc). Measures severe alienation, self-contempt, apathy, cognitive disruption, inertia, feelings of unreality, alien impulses, and motor

and sensory impairment.

- **9.** Hypomania (Ma). Measures a rapid and energetic personal tempo, hyperarousal, hyperactivity, stimulation-seeking, euphoria, imperviousness, undercontrol, and rebellious impulses (high scores), versus lethargy, slowness, submissiveness, vulnerability, scrupulousness and, occasionally depression (low scores).
- **10.** Social Introversion (Si). Measures introversion, shyness, social anxiety, social timidity and awkwardness, and social avoidance (high scores), versus extroversion, outgoingness, social comfort and skill, social intrepidity, and social stimulation-seeking (low scores).

The success of the MMPI was measured not only by its sales and distribution but also by the amount of research interest it attracted. By the mid-1950s, the MMPI literature had accumulated 700 references, and by 1965, this number had expanded to more than 2,000. In the next decade the latter number would triple. Over time, the success of the MMPI in the United States drew the interest of psychologists and psychiatrists from countries around the world, eventually culminating in scores of translations for use in dozens of countries.

With the accumulation of empirical correlates made possible by research interest and as a means of facilitating classification and communication about MMPI data, a coding system was devised whereby the clinical scales could be identified by number in order to bypass the implications of the diagnostic constructs implicit in their names, as follows: Hypochondriasis (Hs) came to be represented as Scale 1, Depression (D) as Scale 2, and so on, up to Hypomania (Ma) as Scale 9. This convention enabled a convenient shorthand for describing MMPI profile patterns such that, for example, a profile having its primary elevations on D and Pt could be coded as a 27/72. This coding system is described more fully in Chapter 3.

With the passage of time, several weaknesses of the MMPI came to be exposed. Some that were present from the beginning had been allowed to go uncorrected; others

became evident only gradually, with the accumulation of research, the march of cultural and demographic changes within the United States, and the introduction of previously unforeseen applications. The chief chronic inadequacy of the MMPI stemmed from Hathaway's need to base his test norms on the original sample of 724 normals who had served as the primary nonpathological reference group for the development of the eight basic clinical scales (i.e., Scales Hs-1, D-2, Hy-3, Pd-4, Pa-6, Pt-7, Sc-8, and Ma-9); these basic clinical scales, plus Scales Mf-5 and Si-0, comprise the standard clinical scales of the MMPI/MMPI-2. The repeated use of these subjects as contrasts for Hathaway's pathological criterion groups deprived those groups, in a statistical sense, of their "normal" levels of abnormality. Hathaway and McKinley wanted to collect data from a large additional sample of normal subjects on which a proper set of norms could be based, but they were prevented from doing so by a lack of funds. They therefore had to make do with their tainted sample to establish the MMPI norms.

The inadequacy of these original norms was later made strikingly clear (Colligan et al., 1983; Pancoast & Archer, 1989), as the results of research conducted around the country repeatedly found the scores of newly collected normal samples to hover around a *T*-score of 55. There were additional reasons for newly collected normals to score higher than Hathaway's normals. For the most part, the newer subjects were not excluded from samples because they were under a doctor's care at the time of testing, as Hathaway's subjects had been. Another factor was the tendency for later test administrators to discourage the use of the *Cannot Say (?)* response category, thereby increasing the number of responses that could contribute to scale elevations (the original normals had not been discouraged from leaving items unmarked). Perhaps anticipating this