

# **25 Historical Highlights in Using the MMPI/MMPI-2 in Personal Injury Cases or Compensation Evaluations<sup>1</sup>**

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James N. Butcher  
Professor Emeritus  
University of Minnesota

McKinley & Hathaway (1940) published the Hypochondriasis or Hs Scale as a means of understanding physical symptoms reported by the patient. They also developed the Hysteria or Hy scale (McKinley & Hathaway, 1944) to measure the expression of physical complaints in the context of hysteroid personality characteristics (e.g. denial). Hundreds of articles have been published on the use of the MMPI and MMPI-2 scales in assessing patients in medical contexts. A recent review of MMPI/MMPI-2 research by Butcher, Hass, Greene & Nelson (2015) provides an overview of using the MMPI-2 in personal injury evaluations. This Highlight File notes some of the special contributions that were made showing the utility of MMPI scales in describing and predicting behavior pertinent to compensation seeking or personal injury litigation or PTSD compensation. Numerous contributions to this forensic assessment could have been included. Several major research studies are highlighted and their findings/implications for personal injury litigation are noted here.

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## HIGHLIGHTS

- 1973 Sternbach, Wolf, Murphy and Akeson conducted a study which showed that the presence of a pending compensation action served to exaggerate the psychophysiological and psychopathic scales of the MMPI.
- 1983 Repko and Cooper conducted a study to evaluate a group of patients seen for psychiatric evaluation that involved workers' compensation litigation. Demographic data and MMPI data, including mean profiles and frequent 2-point code patterns were employed to assess the clients along with frequencies of presenting complaints grouped into 5 categories. Male vs. female testing patterns were compared, Spanish-version patterns on the MMPI were reported, and the Spanish-version patterns on the MMPI were compared with standard MMPI English versions. Findings provide useful information to the practicing clinician who is involved in the diagnostic evaluation process with workers' compensation cases. Results are discussed with reference to validity indicators.
- 1984 Pollack and Grainey compared the MMPI scores of state disability applicants: private industrial insurance applicants, and applicants for adoption in order to investigate the effectiveness of the MMPI in predicting successful outcomes (attainment of disability benefits or adoption of a child). Results showed that the adoption group had the most normal MMPI scores, and a lower or normal MMPI score increased the likelihood of a positive outcome. Private disability Ss had scores significantly higher than the adoption Ss but lower than the state disability Ss. Differences between the state and private disability groups suggested that private disability Ss would more likely be placed in employment than state disability Ss. Private disability Ss had elevations on the Hypochondriasis and Hysteria scales with a lower Depression score. State disability Ss had extremely high MMPI scores; their high *F*-scale scores suggest malingering, confusion, or severe emotional problems. In addition, significant sex differences were found for MMPI scales *Hs*, *D*, *Hy*, *Mf*, *Pt*, and *Sc*. The effects of injury had a more damaging effect on the psychological status of males.
- 1984 Jarvis and Hamlin discussed 4 types of problems that may discredit neuropsychological evaluations conducted for personal injury cases: administration and scoring problems, failure to consider the possible effects of medications, the necessity of determining the possible effects of pre-existing psychiatric disorders, and potential malingering or exaggeration of deficits. To determine the possibility of malingering, it is recommended that attention be paid to the validity scales of the MMPI and that the consistency between tests that require some of the same abilities be examined.
- 1984 Chaney, Williams, Cohn, and Vincent evaluated posttrauma MMPI scores of

- posttrauma patients, patients with organically based illnesses, and patients with psychogenic pain/functional complaints. They reported differences among the groups on the *Hy*, *Ma*, and *F* scales. Clients with a 1–3/3–2 profile, the psychogenic group had significantly higher elevation over the posttrauma and organic groups. Among those with 8 (*Sc*) or 9 (*Ma*) high, both with and without 1–3/3–2 high, differences were found: The posttrauma and organic groups showed marked elevation over those in the psychogenic group. Results indicated that the MMPI is a viable aid in distinguishing between patients with posttraumatic stress disorder and those with functional disorders. The results suggested that MMPI profiles of patients with posttraumatic stress disorder more closely resemble the MMPI profiles of patients who have organic disease with pain caused by organic pathology than the profiles of patients with psychogenic pain and/or hypochondriasis.
- 1985 Fairbank, McCaffrey and Keane administered the MMPI to Vietnam veterans with posttraumatic stress disorder (PTSD) and to two control groups instructed to fabricate the symptoms of PTSD. These two groups were composed of well-adjusted Vietnam veterans and male mental health professionals who were familiar with the diagnostic criteria of PTSD. Both groups with factitious PTSD produced elevations on scale *F* and on the PTSD scale developed by Keane and colleagues (see record that were significantly higher than those of Ss with actual PTSD. A discriminant function analysis of selected scale scores and an empirically derived decision rule correctly classified over 90% of the Ss.
- 1990 Hersch and Alexander compared MMPI profiles of employees referred for psychological evaluation and a sample of employees, from a study of Repko and Cooper who had been seen for evaluation related to workers' compensation (WC) litigation. In both samples, an almost identical percentage of MMPI profiles reflected significant psychopathology (85 vs. 83%). In referred Ss, there were almost twice as many MMPIs of questionable validity (16%) as in WC Ss (7%). The same 5 2-point code types were the most frequently occurring in both samples; they accounted for about half of the profiles in each study. Three of these code types (12/21, 13/31, and 23/32), which involve the Hypochondriasis, Depression, and Hysteria scales, represented 38% of WC and 26% of referred Ss.
- 1992 Jordan, Nunley and Cook examined the relationship between service-connection (financial compensation) and exaggeration of posttraumatic stress disorder (PTSD) symptoms. Inpatient Vietnam combat veterans in PTSD treatment comprised 3 groups: Ss financially compensated for PTSD, Ss financially compensated for physical or other mental problems, and Ss not financially compensated. Results indicate that those who were not service-connected did not exaggerate symptoms on the MMPI *F*-scale (Validity) more than those who were service connected. Also *F* scores reported for inpatient PTSD were higher than previously established cut-off criteria found chiefly in outpatient populations.
- 1992 Fordyce, Bigos, Batti'e and Fisher conducted a work-place evaluation of people with back injury using MMPI-2. They evaluated the extent to which scale 3

- served as a predictor of back injury. They found that both job task dissatisfaction and elevations on the MMPI-2 Hy scale were statistically related to back injury reporting.
- 1993 DuAlba and Scott conducted a post hoc study of Hispanics and Caucasians who had filed workers' compensation claims. They examined cross-cultural differences of somatization and malingering as assessed by the MMPI. Somatization was assessed by analyzing 2- and 3-point code types based on Scales 1 (Hs), 2 (D), and 3 (HY) of the MMPI. Malingering was evaluated by analysis of the dissimulation index from the MMPI. Significant differences were found for somatization; Hispanics were more likely to somatize problems. Minimal differences were found between Hispanic and Caucasian Ss on the malingering.
- 1994 Dush, Simons, Platt and Nation conducted a study comparing patients with chronic pain who either were or were not involved in litigation over settlement for their injuries were examined as a naturally occurring group where various distortions or differences in test findings on the MMPI-2 were expected. Patients were compared on 10 key MMPI-2 scales (e.g., Psychopathy, the Conversion F, Subtle–Obvious, Post-traumatic Stress, and Cynicism) selected a priori by 4 psychologists experienced in behavioral medicine and pain management. A multivariate analysis of variance (MANOVA) revealed a significant difference between litigators and nonlitigators: litigators were most distinct in endorsing more obvious and fewer subtle symptoms. The next largest distinction was an emphasis on the Conversion V for litigators, favoring physical symptoms or explanations for problems over psychological or emotional ones.
- 1995 Gatchel, Polatin, and Kinney evaluated whether a comprehensive assessment of psychosocial measures is useful in characterizing those acute low back pain patients who subsequently develop chronic pain disability problems. Analyses, conducted to differentiate between those patients who were back at work at 6 months versus those who were not because of the original back injury, revealed the importance of 3 measures: self-reported pain and disability, the presence of a personality disorder, and scores on Scale 3 of the MMPI. These results demonstrate the presence of a psychosocial disability variable that is associated with those injured workers who are likely to develop chronic disability problems.
- 1995 Gandolfo conducted a study to determine if the MMPI-2 differentiated between worker's compensation claimants with psychological problems who presented with work-related harassment or nonharassment complaints. The results showed that the MMPI-2 mean scores revealed that those in the harassment group scored significantly higher than the claimants in the nonharassment group on Scale 6 of the MMPI-2. Claimants in the harassment group showed more oversensitive, suspicious, and angry characteristics than people in the non harassment group. There was no evidence that the harassment group was more likely to exaggerate or malingering than the nonharassment group. The profile pattern for both groups was otherwise very similar to those found in previous studies that have used

- MMPI worker's compensation claimants who present with psychological problems.
- 1995 Berry, Wetter, et al. conducted a study using the MMPI-2 validity scales to compare four groups: nonclinical participants answering under standard instructions, nonclinical participants instructed to fake closed-head injury (CHI) symptoms, non-compensation-seeking CHI patients, and compensation-seeking CHI patients. The highest scores on MMPI-2 over-reporting scales were obtained by nonclinical participants faking CHI, and significantly higher scores on these scales were obtained by compensation-seeking relative to non-compensation-seeking CHI patients. These results suggest that MMPI-2 over-reporting scales are sensitive to fabrication of CHI complaints, and possibly to exaggeration of CHI complaints, although further research is necessary to evaluate the latter hypothesis fully.
- 1995 Gatchel, Polatin and Mayer evaluated whether a comprehensive assessment of psychosocial measures would be useful in characterizing those acute low back pain patients who subsequently develop chronic pain disability problems. A cohort of patients was evaluated, with all patients being administered a standard battery of psychological assessment tests. A structured telephone interview was conducted 6 months after the psychological assessment to evaluate return-to-work status. Analyses, conducted to differentiate between those patients who were back at work at 6 months versus those who were not because of the original back injury, revealed the importance of 3 measures: self-reported pain and disability, the presence of a personality disorder, and scores on Scale 3 of the MMPI. These results demonstrate the presence of a psychosocial disability variable that is associated with those injured workers who are likely to develop chronic disability problems.
- 1996 Frueh, Smith and Barker studied differences between compensation seeking (CS) veterans and noncompensation seeking (NCS) veterans on the MMPI-2 and other psychological measures in 142 combat veterans who were evaluated for posttraumatic stress disorder (PTSD) at an outpatient Veterans Affairs hospital PTSD clinic. Patients were grouped on the basis of their compensation seeking status, with 69% classified as CS for PTSD. The CS veterans achieved significantly more pathological scores across a wide range of psychological inventories and MMPI-2 validity indices, although they did not differ in frequency of PTSD diagnoses from NCS veterans. Implications of these findings are discussed, and clinicians are advised to be aware of the compensation seeking status of combat-veterans being evaluated for PTSD.
- 1997 Youngjohn, Davis and Wolf used MMPI-2 profiles of consecutive patients with moderate/severe head injury to compare with those of consecutive symptomatic minor/mild head injury patients. Of the severely injured, 18 had ongoing litigation and 12 did not. All 30 minor/mild patients were in litigation. The severe litigating group had significant elevations on Hypochondriasis (*Hs*), Hysteria (*Hy*),

- Schizophrenia (*Sc*), and Health Concerns relative to the severe nonlitigating group. The minor/mild group had significant elevations on *Hs*, Depression (*D*), *Hy*, and Psychasthenia (*Pt*) over both the litigating and nonlitigating severe groups and additional elevations on *Sc* and Health Concerns over the severe nonlitigating group. Results are discussed in terms of the influence of litigation and injury severity on symptom endorsement on the MMPI-2.
- 2000 Vendrig conducted a study of chronic pain patients in Holland and found a specific subset of the items on Scale 3 related to the report of lassitude and malaise (Hy3) was related to failure to return to work after participating in a chronic pain program in the Netherlands. Personality factors associated with the *Hs* scale such as somatic preoccupation and a naïve denial of emotional or interpersonal difficulties lends a vulnerability to the individual toward the development of a chronic pain condition and becoming disabled.
- 2000 Elhai, Gold, Frueh and Gold conducted a cross-validation of a previous study (Elhai, Gold, Sellers, and Dorfman, 2001) using combat-related war veterans in an outpatient posttraumatic stress disorder (PTSD) treatment program to distinguish genuine from malingered PTSD on the MMPI-2 . The MMPI-2 scores were compared with those of adult college students instructed and trained to malingere PTSD. MMPI-2 over-reporting variables examined were F, |F-Fb|, F-K, F(p), *Ds*<sub>2</sub>, O-S, OT, and FBS. They used a stepwise discriminant analysis identified F, |F-Fb|, F-K, *Ds*<sub>2</sub>, O-S, and OT as the best malingering predictors. A predictive discriminant analysis yielded good hit rates for the model with impressive cross- validation results. The authors discussed clinical implications for using the MMPI-2 to distinguish malingered PTSD from combat-related PTSD.
- 2001 Colotla, Bowman and Shercliff conducted a test-retest study of injured workers to examine the stability of MMPI-2 scores over time for this population. Ninety-four workers completed MMPI-2 on 2 separate occasions, with an average lag of 21.3 months (*SD* = 14.1, range = 2-75), within the context of a psychological assessment after suffering an injury due to crime or accident. MMPI—2 profiles were moderately consistent, with correlation coefficients ranging from .61 to .73 for clinical scales, from .52 to .80 for supplementary scales, from .65 to .78 for content scales, and from .32 to .73 for the Personality Psychopathology Five scales. The results suggest that the MMPI-2 provides consistent and stable results across time in injured workers.
- 2002 Lanyon and Almer tested whether the personal characteristics, as measured by the MMPI-2 scales related to attention-seeking behavior through somatization, would differ between compensable personal injury claimants who choose to go to litigation and those who choose not to litigate. The study examined the MMPI-2 profiles and other file data on 96 patients who litigated and 46 who chose not to litigate (aged 20-64 yrs.). The differences between the two groups were accounted for by the litigating patients' significantly higher scores on the hypochondriasis

- (Hs), depression (D), and hysteria (Hy) scales. The Hs and Hy differences held up separately in claimants with physical injuries and in claimants whose injuries were psychological only. The differences also persisted after severity of injury was held constant. The profiles of the two groups did not differ in either defensiveness or exaggeration. At least some of the differences in reported impairments between patients in general and personal injury claimants appear to be related to whether the patients choose to litigate, and the choice to litigate could be a function of personality-related, rather than situational, factors.
- 2003 Franklin, Repasky, Thompson, Shelton and Uddo studied response styles of veterans seeking compensation for PTSD. Veterans were classified as having a valid or over-reporting response style based on their scores on three MMPI-2 validity scales that measure over-reporting  $F$ ,  $F(p)$ ,  $F-K$ . Sixteen percent of veterans had valid scores on all three scales. The number of veterans classified as having an over-reporting response style differed depending on which scale was used. The results of this study suggested the value of using multiple validity scales to measure response style. Veterans who were and were not classified as over-reporters were compared on measures of combat exposure, PTSD, and depression.
- 2004 Long, Rouse, Nelson and Butcher conducted a study analyzed archival MMPI-2s produced by women and men who initiated legal claims of ongoing emotional harm related to workplace sexual harassment and discrimination. The MMPI-2s were administered as a part of a comprehensive psychiatric forensic evaluation of the claimants' current psychological condition. All validity and clinical scale scores were analyzed and cluster analyses were obtained. Among the women, 28% produced a "normal limits" profile, providing no MMPI-2 support for their claims of ongoing emotional distress. Cluster analysis of the validity scales of the remaining profiles produced four distinctive clusters of profiles representing different approaches to the test items.
- 2006 Livingston, Jennings, Colotla, Reynolds and Shercliffe examined the stability of MMPI-2 code types in a sample of injured workers with a mean test-retest interval of 21.3 months ( $SD = 14.1$ ). They found congruence rates for undefined code types were 34% for high-point codes, 22% for 2-point codes, and 22% for 3-point codes. The data provide tentative evidence suggesting that defined code types are more stable than undefined code types. They calculated Cohen's kappa statistic, a measure that controls for chance agreement, for each clinical scale for both 2-point and 3-point code types. Only 2 of the 20 kappa coefficients were not significant at the  $p = .05$  level.
- 2018 Butcher, Front & Ones (2018) provided a current overview of assessment in personal injury litigation in their article "Assessing psychopathology in high-risk occupations."

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