

A Retrospective Analysis of Rates of Malingering in a Forensic Psychiatry Practice

Lillian J. Svete, MD, William W. Tindell, MD, Christopher J. McLouth, PhD, and Timothy S. Allen, MD

Malingering is defined as the intentional falsification or exaggeration of symptoms for secondary gain. The prevalence of malingering varies widely among different medicolegal contexts, emphasizing the need to identify additional predictive factors when considering the diagnosis. This study measured rates of malingering in a sample of 1,300 subjects from a forensic psychiatry practice located in Lexington, Kentucky. Among those who failed at least three symptom or performance validity scales, odds ratios for malingering were approximately twice as high in subjects with less than a college education ($p = .011$), those referred by the opposing counsel ($p = .001$), and those meeting criteria for a mental illness in three or more DSM-5 diagnostic categories ($p = .015$). Those evaluated for worker's compensation and head injury were more likely to malingering than other case types ($p = .028$). Men were found to malingering at a higher rate than women ($p = .014$), and no significant differences were observed based on race. These results indicate that education, gender, psychiatric history, case type, and referral type may be important factors to consider when assessing for malingering.

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Forensic practitioners must take special care when assessing for falsification or exaggeration of symptoms. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) states that malingering should be considered if there is marked discrepancy between the individual's claimed symptoms and objective findings, if the individual has antisocial personality disorder or is uncooperative with the evaluation, or if the evaluation was performed in a medicolegal context.¹ Literature suggests that these indicators for malingering are largely not useful and introduce potential for confirmation bias.² For example,

uncooperativeness is a poor prognosticator for malingering and is more closely associated with psychotic illness.³ In addition, symptom discrepancy is a core feature of functional neurological disorder and somatic symptom disorder, conditions in which symptoms are not misrepresented.⁴ False reporting can also be sequelae of "compensation neurosis," which is defined by the unconscious exaggeration of symptoms that occurs as a result of a unique stressor.⁵ Compensation neurosis is associated with borderline, antisocial, narcissistic, and histrionic personality disorders.⁵ All of these conditions can be difficult to differentiate from feigning, which refers to purposeful falsification of symptoms to deceive.⁶

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) includes two diagnoses that involve feigning: factitious disorder and malingering. Malingering refers to the misrepresentation of symptoms for an external incentive, whereas factitious disorder is characterized by feigning of symptoms for the psychological gain of playing the

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Dr. Svete is a PGY-4 resident in psychiatry, and Dr. Allen is Assistant Professor, Forensic Psychiatry, College of Medicine, and Dr. McLouth is a Biostatistician and Assistant Professor, College of Public Health, University of Kentucky, Lexington, KY. Dr. Tindell is a psychiatrist, Kaiser Permanente, San Francisco, CA. Address correspondence to: Lillian J. Svete, MD. E-mail: Lillian.svete@uky.edu.

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sick role.^{6,7} Identifying malingering is especially challenging in cases where symptoms are not completely feigned. Resnick *et al.*⁸ identified three types of malingering: pure malingering, which refers to complete fabrication of symptoms; partial malingering, defined as amplification of existing symptoms; and false imputation, which inappropriately assigns causal blame for genuine symptoms.^{6,8} It is important to note that the presence of malingering does not exclude the possibility of true illness or impairment.

Malingering is not only challenging to identify, but assigning the diagnosis comes with significant risk to the evaluatee and forensic practitioner. Misclassifying malingering leads to injustice for the evaluatee, damaging the evaluatee's credibility and potentially subjecting the evaluatee to unjust consequences.⁹ Because of the inherent difficulty in proving malingering and the potential risks for the evaluatee, forensic practitioners are at high risk of liability for defamation and malpractice.¹⁰ Because of the serious implications of malingering, Knoll and Resnick¹⁰ suggested that the diagnosis should not be made unless there is a high degree of medical certainty.^{9,10}

Conversely, failure to detect malingering can have serious consequences in many domains. In clinical settings, feigned symptoms can lead to iatrogenic harm.¹¹ Malingering can also lead to unnecessary insurance, legal, and medical costs. In 2011, the estimated social security costs of malingering for adult disability claimants was \$20.02 billion.¹² When considering malingered traumatic brain injury among U.S. veterans, disability costs were estimated to be \$146 to \$235 million per year.¹³

In a forensic psychiatric setting, neuropsychological assessments are one set of instruments that can be used to assist in the identification of malingering. These assessments include performance validity tests (PVTs), which assess for effort, with scores below chance representing the best determinant of malingering.¹⁴ To assess the validity of self-reported symptoms, symptom validity tests (SVTs) are utilized. SVT items can elicit rare, unlikely, or amplified symptoms of a particular diagnosis.⁶ Although PVTs and SVTs are the most objective method to detect malingering, they have limited sensitivity and specificity.¹⁵ Because of the risks of misidentifying malingering, research has aimed to keep false-positive results to 10 percent or less. As a result, specificity is optimized at the expense of sensitivity.¹⁶⁻¹⁸ Therefore, normal scores on validity measures do not

exclude the possibility of feigning. These limitations lead to the importance of identifying additional factors when considering the condition.

The prevalence of malingering in various medico-legal contexts has been extensively studied. Literature suggests that rates of malingering vary significantly but tend to correlate with the potential for compensation and severity of criminal charges.⁶ For clients asserting incompetence to stand trial or an insanity defense, rates of malingering range from eight to 21 percent.⁶ For more severe charges involving murder and robbery, rates for malingering have been observed as high as 38 percent.¹⁹ In civil proceedings, rates of malingering range from 20 to 50 percent for those seeking compensation for chronic pain or mild traumatic brain injury (TBI) and 30 percent for veterans seeking disability benefits for posttraumatic stress disorder (PTSD).²⁰⁻²² For students assessed for attention-deficit and hyperactivity disorder (ADHD) or a learning disability, rates of malingering have been estimated to range from 15 to 50 percent.²³⁻²⁵

Demographic factors associated with malingering have received less attention in the literature. Several studies have investigated demographic characteristics of malingering in clinical settings where the condition was assigned based on DSM-5 criteria.^{1,26,27} A meta-analysis conducted by Udoetuk *et al.*²⁷ investigated racial and gender differences in malingering from nonpsychiatric hospitals and emergency departments. In the inpatient setting, men were more than twice as likely to meet criteria for malingering when compared with women. Adjusted odds ratios suggested no differences in rates of malingering between Blacks and Whites but appeared lowest among Hispanic men. In the emergency room setting, Whites were most likely to meet criteria for malingering, whereas there were no differences based on gender.²⁷ A case control study by Park *et al.*²⁶ assessed for demographic factors of malingering using a population of 57 patients in an emergency department setting. When compared with date-matched controls, patients who malingered were more likely to be Black, male, homeless, older than 45 years, and have additional psychiatric diagnoses, antisocial personality traits, substance use disorders, and frequent emergency department visits.²⁶ In these studies, methods for detecting malingering were not standardized with validity testing and evaluators were not blinded, suggesting potential for observer bias.

In the inpatient psychiatric setting, literature suggests that malingering is overrepresented in Black individuals and those of low socioeconomic status.²⁸ In addition, a study by Nesbit-Bartsch *et al.*²⁹ suggested that, in a clinical interview setting, evaluators were more likely to determine that men were malingering when compared with women. There were no differences, however, in validity measures based on gender.²⁹ These disparities raise concern for the role of implicit bias and prejudice in identifying the condition, highlighting the importance of objective validity assessments.

Several studies have assessed demographic factors associated with malingering via utilization of PVTs and SVTs. One study by Young *et al.*³⁰ assessed for an association between various personality traits and malingering. The study consisted of 63 subjects undergoing neuropsychologic evaluation for compensation after mild head injury. Malingering was assessed with the Test of Memory Malingering (TOMM)³¹ and Raven's Standard Progressive Matrices (RSPM).³² Based on score results, 23 of the 63 subjects met criteria for malingering. They were given the Eysenck Personality Questionnaire-Revised Short Scale (EPQ-RS)³³ to examine the psychoticism, neuroticism, extraversion, and lie scales. The results did not show any correlation between personality traits and malingering, suggesting that additional factors may be involved.³⁰ Braun *et al.*³⁴ evaluated demographic characteristics in a sample of 1,261 White and Black male veterans who were referred for outpatient neuropsychologic testing. Malingering was assessed using the TOMM³¹ and Medical Symptom Validity Test (MSVT).³⁵ Results showed that rates of malingering were higher in patients who were younger in age, had less education, and had a service connection for disability.³⁴ Limitations to this study included generalizability and potential for false positives, given veterans were not informed whether the study would affect their disability benefits.

The study by Braun *et al.*³⁴ discovered racial differences between the TOMM and MSVT. In the absence of malingering, it is generally accepted that validity testing results do not vary based on demographic factors, namely age, race, and education.^{34,36} There have been a few studies suggesting that older and less educated patients may be more likely to fall below the cutoff of the MSVT and TOMM.³⁷⁻³⁹ One such study discovered differences in performance only for those who were functionally illiterate.³⁹

When utilizing multiple independent assessments to test for malingering, false-positive errors are minimized and the probability of detecting malingering is optimized.³⁸ It has been generally accepted that a threshold of failing at least two validity tests will minimize false-positive results.³⁷

This study aimed to identify demographic and clinical factors associated with symptom falsification by utilizing multiple validity scales in a robust sample of 1,300 subjects. Given that all evaluations were conducted in a forensic context, where external incentives influence client behavior, secondary gain was implied for those who failed multiple validity scales. To maximize specificity, malingering was considered present for those who scored below the scale authors' cutoff for inadequate effort (PVT) or symptom magnification (SVT) on at least three validity scales. No explicit hypotheses were made because of the exploratory nature of this study.

Methods

The sample included data from 1,300 subjects undergoing psychiatric evaluations at a forensic psychiatry practice in Lexington, Kentucky. Data were collected between January 1, 2014 and May 1, 2021. Demographic and clinical characteristics were extracted from the forensic reports, including age, race, sex, education, referral type, and case type. Case type was stratified into the following categories: criminal, disability, fitness for duty, head injury, personal injury, worker's compensation, and other. Head injury cases were excluded from other categories. Psychiatric diagnoses (subjects' lifetime history) were sorted by DSM-5 diagnostic category. The total number of categories in which each subject had at least one diagnosis was recorded as the number of DSM-5 diagnostic categories met.

For each subject, malingering was assessed with validity scales, including the Test of Memory Malingering, both Trial 2 and Retention trial (TOMM-T2 and TOMM-R)⁴⁰; Letter Memory Test (LMT)⁴¹; Victoria Symptom Validity Test, including Easy, Difficult, and Total subscales (VSVT-EZ, VSVT-DIF, and VSVT-TOT)⁴²; and MMPI 2-Restructured Form (MMPI-2-RF) scales, including Infrequent Responses (F-r), Infrequent Psychopathology Responses (Fp-r), Infrequent Somatic Responses (Fs), Fake Bad Scale Responses (FBS-r), Response Bias Scale (RBS), and Underreporting Lie Responses (L-r).^{43,44} In this study,

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Table 1 Univariate (Unadjusted) Relationships between Malingering and Demographic and Clinical Factors

	Total Sample <i>n</i> = 1,300	No Malingering <i>n</i> = 983 (75.6%)	Malingering <i>n</i> = 317 (24.4%)	Test Statistic	<i>p</i> -Value
Age, mean (SD)	45.7 (14.9)	45.7 (12.6)	45.1 (10.5)	0.73	0.467
Sex, <i>n</i> (%)	—	—	—	6.05	0.014
Male	808 (62.2)	593 (73.4)	215 (26.6)	—	—
Female	491 (37.8)	390 (79.4)	101 (20.6)	—	—
Education, mean (SD)	12.8	12.8 (2.6)	12.2 (2.4)	3.93	<.001
Education, <i>n</i> (%)	—	—	—	18.46	<.001
<12 years	181 (14.0)	133 (73.5)	48 (26.5)	—	—
12 years or GED	646 (5.0)	470 (72.8)	176 (27.2)	—	—
Some college	254 (19.6)	190 (74.8)	64 (25.2)	—	—
College graduate	215 (16.6)	187 (87.0)	28 (13.0)	—	—
Race, <i>n</i> (%)	—	—	—	0.71	0.877
White	1,183 (91.3)	895 (75.7)	288 (24.3)	—	—
Black	71 (5.4)	52 (73.2)	19 (26.8)	—	—
Hispanic	22 (1.7)	18 (81.8)	4 (18.2)	—	—
Other	19 (1.5)	14 (73.7)	5 (26.3)	—	—
Case type, <i>n</i> (%)	—	—	—	20.25	0.003
Criminal	16 (1.2)	12 (75.0)	4 (25.0)	—	—
Disability	19 (1.5)	16 (84.2)	3 (15.8)	—	—
Fitness for duty	33 (2.5)	32 (97.0)	1 (3.0)	—	—
Head injury	527 (40.5)	382 (72.5)	145 (27.5)	—	—
Personal injury	126 (9.7)	109 (86.5)	17 (13.5)	—	—
Worker's compensation	573 (44.1)	427 (74.5)	146 (25.5)	—	—
Other	5 (0.4)	4 (80.0)	1 (20.0)	—	—
Lifetime presence of mental illness, <i>n</i> (%)	—	—	—	3.9	0.048
No	94 (7.2)	79 (84.0)	15 (16.0)	—	—
Yes	1,206 (92.9)	904 (75.0)	302 (25.0)	—	—
Number of DSM-5 diagnostic categories met, <i>n</i> (%)	—	—	—	11.47	0.009
0	94 (7.2)	79 (84.0)	15 (16.0)	—	—
1	498 (38.3)	393 (78.9)	105 (21.1)	—	—
2	454 (34.9)	331 (72.9)	123 (27.1)	—	—
≥3	254 (19.5)	180 (70.9)	74 (29.1)	—	—

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; GED = general equivalency diploma; SD = standard deviation. Not all comparisons utilize 1,300 observations, as some data were missing.

malingering was considered present if the subject failed at least three validity scales, according to the scale author's guidelines.

Unadjusted analyses were used to identify the relationships between malingering and demographic and clinical factors using chi-square tests for categorical variables and *t* test for continuous variables. Multivariable logistic regression was used to predict the probability of malingering based on demographic and clinical characteristics. Fifty-four individuals were missing at least one demographic or clinical data point. These individuals were excluded from the multivariable logistic regression analysis but were otherwise included in unadjusted analyses. Regression coefficients were exponentiated and presented as odds ratios and 95 percent confidence intervals. A *p* value <.05 was used for statistical significance. Data management and analysis were performed using SAS version 9.4.

Results

Demographics

Table 1 lists the demographic and clinical information of the 1,300 subjects who participated in the study. The average age for subjects was 45.7, with 62.2 percent being male. Regarding educational status, 14.0 percent had less than 12 years of education, 5.0 percent had a high school education or general equivalency diploma (GED), 19.6 percent had some college, and 16.6 percent were college graduates. The majority of subjects were White (91.3%), whereas 5.4 percent were Black, 1.7 percent were Hispanic, and 1.5 percent belonged to other races. Most cases were for worker's compensation or head injury (44.1% and 40.5%); 9.7 percent of cases were a party to a personal injury lawsuit. Other cases included criminal evaluation (1.2%), Social Security Disability (1.5%), and fitness

Table 2 Comparison of Malingering Scales

	<i>n</i>	No Malingering <i>n</i> = 983	Malingering <i>n</i> = 317
Tests taken	1,300	9 (9–9)	11 (10–11)
TOMM-T2	1,245	50 (49–50)	40 (31–47)
TOMM-T2 ≤ 45		62 (6.7%)	225 (71.9%)
TOMM-R	281	46 (38–49)	34 (29–40)
TOMM-R ≤ 45		30 (45.5%)	202 (94.0%)
VSVT-EZ	1,227	24 (24–24)	22 (20–24)
VSVT-EZ ≤ 7		0 (0%)	5 (1.6%)
VSVT-DIF	1,227	22 (18–24)	10 (7–15)
VSVT-DIF ≤ 7		12 (1.3%)	100 (32.1%)
LMT	439	0.96 (0.84–1)	0.73 (0.6–0.87)
LMT ≤ 93%		78 (42.6%)	228 (89.1%)
MMPI F-r	1,249	74 (61–92)	111 (92–120)
MMPI F-r ≥ 100		129 (13.7%)	208 (67.1%)
MMPI Fp-r	1,249	51 (42–59)	68 (59–77)
MMPI Fp-r ≥ 100		6 (0.64%)	40 (12.9%)
MMPI Fs	1,249	66 (50–75)	91 (74–115)
MMPI Fs ≥ 100		28 (3.0%)	120 (38.7%)
MMPI FBS-r	1,249	77 (67–86)	90.5 (83–99)
MMPI FBS-r ≥ 100		18 (1.9%)	73 (23.6%)
MMPI RBS	1,249	80 (67–88)	105 (92–114)
MMPI RBS ≥ 100		94 (10.0%)	195 (62.9%)
MMPI L-r	1,249	57 (52–66)	62 (52–66)
MMPI L-r ≥ 100		0 (0%)	0 (0%)

LMT = Letter Memory Test; MMPI F-r = Minnesota Multiphasic Personality Inventory, Infrequent Responses; MMPI FBS-r = Minnesota Multiphasic Personality Inventory, Fake Bad Scale Responses; MMPI Fp-r = Minnesota Multiphasic Personality Inventory, Infrequent Psychopathology Responses; MMPI Fs = Minnesota Multiphasic Personality Inventory, Infrequent Somatic Responses; MMPI L-r = Minnesota Multiphasic Personality Inventory, Underreporting Lie Responses; MMPI RBS = Minnesota Multiphasic Personality Inventory, Response Bias Scale; TOMM-R = Test of Memory Malingering, Retention trial; TOMM-T2 = Test of Memory Malingering, Trial 2; VSVT-DIF = Victoria Symptom Validity Test, Difficult subscale; VSVT-EZ = Victoria Symptom Validity Test, Easy subscale.

for duty (2.5%) for employers. Approximately 92.9 percent of patients had a lifetime history of mental illness, with 19.5 percent meeting criteria for a psychiatric diagnosis in at least three DSM-5 diagnostic categories.

Univariate Analysis

Table 1 also presents the univariate, or unadjusted, relationships between an assessment of malingering and demographic and clinical factors. Of the 1,300 individuals in the study, 317 (24.4%) met criteria for malingering. A significantly higher proportion of men met criteria for the condition compared with women (26.6% versus 20.6%; *p* = .014). Those with less than 12 years of education malingered at twice the rate of college graduates (*p* < .001). There was no statistical difference among race (*p* = .877). Those with a history of mental illness met the criteria for malingering at a higher rate when compared with those without (25.0% versus 16.0%, *p* = .048). Malingering determination was positively correlated

with number of psychiatric diagnosis categories, with 21.1 percent meeting criteria for a diagnosis in one DSM-5 category, 27.1 percent in two DSM-5 categories, and 29.1 percent in three or more DSM-5 categories (*p* = .009).

Comparison of Malingering Scales

Table 2 includes data for each validity assessment based on determination of malingering. For each scale, the mean score and score range are presented, followed by the number and percentage of individuals who scored below the cutoff. Because the groups were defined in part by their scores on these scales, *p* values were not included. Of those in the malingering group, the TOMM-T2, TOMM-R, LMT, MMPI F-r, and MMPI RBS had the highest percentage of failures. Only five individuals scored below the cutoff on the VSVT-EZ (all fell in the malingering group), and no individuals failed the MMPI L-r.

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Table 3 Association Between Demographic and Clinical Factors and Malingering

	Odds Ratio (95% CI)	Statistic	p-Value
Age	1 (0.99–1.01)	1.54	0.214
Sex	—	2.4	0.121
Female	0.8 (0.6–1.06)	—	—
Male	Ref	—	—
Education	—	11.05	0.0009
Less than college	2.16 (1.37–3.39)	—	—
College graduate	Ref	—	—
Race	—	1.27	0.737
Black	1.16 (0.66–2.04)	—	—
Hispanic	0.58 (0.19–1.76)	—	—
Other	1.11 (0.38–3.19)	—	—
White	Ref	—	—
Referral type	—	13.16	0.001
Personal attorney	0.48 (0.32–0.72)	—	—
None	0.47 (0.13–1.79)	—	—
Opposing attorney	Ref	—	—
Case type	—	7.14	0.028
Worker's compensation	1.47 (0.88–2.48)	—	—
Head injury	1.90 (1.13–3.19)	—	—
Other	Ref	—	—
Number of DSM-5 diagnostic categories met	—	10.44	0.015
0	0.47 (0.25–0.89)	—	—
1	0.68 (0.47–0.98)	—	—
2	0.96 (0.67–1.38)	—	—
≥3	Ref	—	—

CI = confidence interval; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; GED = general equivalency diploma.

Multiple Logistic Regression Analysis

Table 3 depicts the results of a multiple logistic regression analysis that was used to determine the odds of malingering determination based on demographic characteristics. Still, no significant differences were observed when considering race. Although there was a higher prevalence of males in the malingering group when compared with females, there was no longer a statistically significant difference in odds of malingering determination based on sex ($p = .121$). When considering education, those with less than a college education were more than twice as likely to meet the malingering criteria when compared with those who were college graduates (odds ratio (OR) = 2.16, 85% confidence interval (CI) 1.37–3.39; $p = .0009$). Those who were referred by their attorney were half as likely to fall in the malingering group (OR = .48, 95% CI, .32–.72; $p = .001$) compared with those referred by the opposite side. Clients who were evaluated for worker's compensation and head injury were almost twice as likely to be assigned as

malingering in comparison to other case types ($p = .028$). Individuals meeting criteria for mental illness in fewer than three DSM-5 categories were less likely to fall in the malingering group (zero DSM-5 categories: OR = .47, 95% CI, .25–.89; one DSM-5 category: OR = .68, 95% CI, .47–.98; two DSM-5 categories: OR = .96, 95% CI, .67–1.39; $p = .015$).

Discussion

Detecting malingering is a complicated process because of challenges in identifying incentive, distinguishing the condition from personality and somatization disorders, deciphering partial malingering, and minimizing risk to the evaluatee and the forensic practitioner in the case of misassigning the condition. Accurately identifying malingering is imperative to promoting appropriate allocation of medicolegal resources and preventing iatrogenic harm. Given that the prevalence of malingering varies significantly among clinical populations, this study aimed to identify additional factors that may be associated with the condition.

Results from this study revealed that assignment of malingering was more than twice as likely for those meeting criteria for a mental illness in three or more DSM-5 categories. Assignment of malingering was also more likely in individuals referred by the opposing side when compared with those referred by their own attorney. Such demographic and clinical factors have not been previously identified to be associated with malingering. Additional studies are warranted to delineate the relationship between these factors and malingering presentations.

Those who were evaluated for worker's compensation and head injury more often met malingering criteria than other case types. This result is consistent with previous studies, which suggest that rates of malingering are higher in such cases related to potential for compensation.^{20–22}

Similar to Braun *et al.*,³⁴ results from this study found that malingering determination was more likely for those who were less educated. These results are not likely confounded by the design of the performance validity assessments, given these scales are considered valid for those who are literate.^{36,39} Future studies are warranted to investigate potential psychosocial factors associated with less education and the propensity to feign symptoms.

Unadjusted analyses found that the rate of malingering assessment was higher in males than in females. After adjusting for competing factors, however, there

were no differences based on gender. In addition, there were no racial differences among profiles that were suggestive of malingering. Previous research indicates that, when the condition is assigned based exclusively on clinical evaluation, rates of malingering are higher among those who are male or Black.^{26,27,29} Such differences have been less commonly observed when malingering was determined based on validity measures. One exception is Braun and colleagues,³⁴ who found that Black evaluatees were more likely to fail the TOMM than Whites.^{29,34} Overall, the current study underscores the importance of utilizing an objective approach with validity assessments to prevent implicit bias. Our findings also highlight the benefit of administering multiple validity measures to promote accuracy.

Literature suggests that consistent results among various validity tests (including both SVTs and PVTs) are more likely to accurately determine malingering while minimizing false-positive results.^{37,38} This study aimed to emulate this concept by utilizing multiple symptom and performance validity assessments to objectively identify feigning. Although the variety of validity assessments is a strength of this study, it is important to note that symptom validity measures, including the F-r, F-s, and L-r scales of the MMPI, assess other threats to validity, not just symptom enhancement.⁴³ This may limit the accuracy of the results.

Because of the challenges in identifying secondary gain, research involving these validity assessments has not been studied in true malingerers but rather participants who simulated malingering.⁴⁵⁻⁴⁷ This further substantiates the limitations and risks of assigning malingering. Although symptom exaggeration and inconsistent reporting have been observed in diagnoses including somatic symptom disorder, functional neurological disorder, and personality disorders, this study did not decipher these conditions when assessing for malingering. Future investigation of these data should address the relationship between these disorders and failure of validity assessments.

Although this study utilized multiple validity measures to assess feigning, simulated adjustment was minimally considered in the malingering criteria. Although feigning refers to overstated pathology, simulated adjustment occurs when the subject attempts to create a false positive impression.⁴⁸ Such

behavior can be observed in fitness for duty cases, in which the individual may want to return to work, maintain a driver's license, or carry a firearm. Although the study included the FBS and L-r, the remaining validity measures did not assess for simulated adjustment. Furthermore, there were no patients in the study who scored above the cutoff on the L-r, highlighting a need to identify more sensitive measures for simulated adjustment.

Most cases in this study involved worker's compensation, head injury, and personal injury civil litigation. Therefore, the results may have limited application to cases involving disability claims and criminal proceedings. Although there were no differences in malingering based on race, the majority of subjects were White, suggesting the results may not accurately represent demographic factors for malingering among racial minorities.

This study encompasses a robust assessment of risk factors associated with malingering. First, this is the largest known study to assess clinical and demographic characteristics associated with symptom falsification. In addition, when compared with similar studies, this study utilized the most rigorous criteria for malingering to maximize specificity. Results suggested that lower education level, history of psychiatric illness, case type, and retaining legal party may be important factors involved in the propensity to malingering. Future studies are necessary to delineate the psychodynamic relationship between these factors and malingering presentations.

In certain cases, the results of this study can help evaluators develop an increased index of suspicion for malingering. It is also important to consider that awareness of such factors can invoke bias. Evaluators should attempt to remain neutral during evaluations to ensure that a complete history can be obtained. Furthermore, test data should be interpreted blindly and should be carefully integrated with information gathered from the clinical interview and medical records. Additional ethical practices should include providing informed consent to evaluatees regarding the consideration of symptom falsification during their assessment. Terms such as "over- or under-reporting" and "symptom exaggeration" should be considered in place of "malingering" to acknowledge the limitations of assigning malingering, minimize risk of litigation for the evaluator, and avoid subjecting the evaluatee to unjust consequences.

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