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LOMA LINDA UNIVERSITY
School of Behavioral Health
in conjunction with the
Department of Psychology

The Assessment of Malingering Within Forensic Populations

By

Caroline Mary Katherine Carr, M.A.

Project submitted in partial satisfaction of
the requirements for the degree of
Doctor of Psychology

September 2015

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Each person whose signature appears below certifies that this doctoral project in his/her opinion is adequate, in scope and quality, as a doctoral project for the degree Doctor of Psychology

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ABSTRACT

The Assessment of Malingering Within Forensic Populations

By

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Doctor of Psychology, Graduate Program in Psychology
Loma Linda University, September 2015
Sylvia Herbozo, Ph.D., Chairperson

The current literature review examines the assessment of malingering in adult forensic populations with a focus on recent applications of measures for identifying feigned psychiatric symptoms. Although a large amount of research on malingering assessment exists, such a review is needed given the limited research on factors that increase an individual's ability to malingering successfully and evade detection. This review also serves as a guide to help clinicians select the most appropriate assessment measures which may vary across cases. Clinical implications of malingering assessment and suggestions for future research are discussed.

LIST OF ABBREVIATIONS

DSM-5	Diagnostic and Statistical Manual-5
APA	American Psychiatric Association
SIRS	Structured Interview of Reported Symptoms
MMPI-2	Minnesota Multiphasic Personality Inventor, 2 nd Edition
BPD	Borderline Personality Disorder
SIMS	Structured Interview of Malingered Symptomatology
M-FAST	Miller Forensic Assessment of Symptoms Test
PAI	Personality Assessment Inventory
ID	Intellectual disability
SU	Subtle Symptoms scale
SEV	Severity of Symptoms scale
SC	Symptom Combinations scale
IA	Improbable or Absurd Symptoms
TI	Trauma Index
RO	Reported vs. Observed scale
ECST-R	Evaluation of Competency to Stand Trial-Revised
PPP	Positive Predicting Power
Fb	Infrequency Infrequency-Back scale
Fp	Infrequency Psychopathology scale
FBS	Fake Bad Scale
RBS	Response Bias Scale
M-DFI	Malingering Discriminant Functioning Index
Fc	Criminal Offender Infrequency Scale of the MMPI-2
MMPI-2-RF	MMPI-2 Restructured Form
FMD	Feigned Mental Disorders
FCI	Feigned Cognitive Impairment

NIM	Negative Impression scale
MAL	Malingering Index
RDF	Rogers Discriminant Function
MFI	Multi-scale Feigning Index
FAC	Factual Understanding
RAC	Rational Understanding
CWC	Ability to Consult with Attorney
ATP	Atypical Presentation scale
PTSD	Post Traumatic Stress Disorder
TOMM	Test of Memory Malingering
APD	Antisocial Personality Disorder
IQ	Intelligence Quotient
SILS	Shipley Institute of Living Scale
BPI	Basic Personality Inventory
PCL-R	Hare Psychopathy Checklist- Revised version
PPI-R	Psychopathic Personality Inventory-Revised
TriPM	Triarchic Psychopathy Measure
LSRP	Levenson Self-Report Psychopathy Scale
MMSE	Mini Mental Status Exam

CHAPTER 1

INTRODUCTION

Malingering is one of the most complicated clinical issues within the field of forensic psychology. While the majority of clinicians are familiar with the definition of malingering, it remains difficult to accurately identify and has been conceptualized differently over the years. A significant amount of research has been conducted to identify indicators of potential malingerers, psychometric measures of malingering, and strategies employed by successful malingerers to evade detection. Yet, despite the plethora of available information to date, the accurate identification of malingering continues to be an area that warrants additional research. For example, a search for “malingering” on PsychInfo yielded 720 published articles in the past five years, and psychiatric malingering produced 26 results. The purpose of this paper is to present a comprehensive review of literature on the assessment of psychiatric malingering within an adult forensic population. Several of the studies that will be discussed in this review utilize multiple malingering measures, including malingering-specific measures, objective personality measures, and malingering screeners. The measures discussed in this review are intended to be used with adults ages 18 and older and thus, measures used for adolescents will not be discussed. This review will describe and synthesize the following topics: research on malingering, current reviews of psychometric measures for malingering, research on factors contributing to undetected malingering, clinical implications of malingering assessment, and directions for future research.

CHAPTER 2

THE FORENSIC POPULATION

According to the Department of Justice (2004), approximately 56% percent of inmates in state prisons, 44.8 % of federal inmates, and 64.2% of local jail inmates are diagnosed with a mental illness and/or receiving mental health treatment. These numbers are alarming, considering that Substance Abuse and Mental Health Services Administration (2013) reported that only roughly 18.5% of the adult population receives some form of mental health treatment. Furthermore, the reported forensic mental health percentages may be a low estimate of the actual percentage given the stigma of receiving mental health treatment. In some cases it may be dangerous for a person to seek mental health treatment at the risk of appearing weak in front of their peers as it could make them more vulnerable to violence. (Hartwell, 2004). At the same time, however, reporting mental health problems does have some benefits and therefore raises the issue as to why psychiatric symptoms may be feigned.

Forensic mental health issues are addressed in a variety of settings. These settings include state-run psychiatric facilities, private psychiatric hospitals, prisons, jails, and specified outpatient treatment programs. For the purpose of this literature review, the majority of participants included in the studies discussed are psychiatric patients within state forensic hospitals. Many of these patients have been diagnosed with chronic and severe mental illnesses including psychotic disorders and severe mood disorders (Resnick, 1997). These patients are also commonly diagnosed with severe personality disorders including Antisocial, Borderline, or Narcissistic types (Resnick, 1997). At the very minimum, all of them have been charged with a crime. Some have been guilty of

committing violent acts against others. This population can also be highly stigmatized by the generalized public. Individuals in the lay population may not support treatment for these individuals given the violent crimes that some have been accused of committing. They may be considered dangerous, untreatable, and psychopathic (Douglas, Nikolova, Kelley, Edens, 2015). This is a population that is often highly complex due to their psychosocial histories including high rates of substance abuse (DeMatteo, Filone, & Davis, 2015), repeated trauma, cognitive limitations, and criminalistics lifestyle (Rosenfeld, Howe, Pierson, Foellmi, 2015). For these reasons and more, accurate assessment of individuals within this population can be difficult to accomplish.

CHAPTER 3

DEFINING MALINGERING

According to the Diagnostic and Statistical Manual-5 (DSM-5; APA 2013), malingering is defined as “intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives such as avoiding military duty, avoiding work, obtaining financial compensation, evading criminal prosecution, or obtaining drugs” (APA, 2013). This definition is found in the section “Other Conditions that May be a Focus of Clinical Attention.” It is included in this section because it is *not* identified as a mental disorder; rather, it is an additional issue to consider alongside an individual’s diagnosed conditions given that it may “affect the diagnosis, course, prognosis, or treatment” (APA, 2013).

There has been a debate within the field regarding the definition of malingering in the DSM-5, and how that definition should be altered. Before the release of the fifth edition of the DSM in 2013, Berry & Nelson (2010) suggested that the outdated malingering definition should be removed from the manual and replaced with an alternative description that reflected recent empirical research. They highlight that the description of malingering has remained unchanged since the DSM-III, despite numerous publications on the subject (Berry & Nelson, 2010). With regards to psychiatric malingering evaluations, Berry & Nelson (2010) recommend that clinicians focus more on objectively identifying feigned symptoms rather than motivations to feign or the context in which the feigning occurs.

In addition to critiques of the definition of malingering within the DSM-5, there is also debate over whether malingering should be considered on a dichotomous (genuine

responding vs. feigned responding) variable, or if malingering should be conceptualized on a dimensional spectrum. Rogers (1997) proposed the following three levels of malingering: mild (mostly exaggeration), moderate (gross exaggeration and fabrication but only focused on select symptoms) and severe (extensive exaggeration and severe fabrications overshadow exaggerations) (Walters et al., 2008). Using data from the Structured Interview of Reported Symptoms (SIRS) only and the SIRS with the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), Walters et al., (2008) examined whether feigning is more appropriately considered as a taxon (category) or falls on a dimension in five samples of criminal and civil forensic examinees. Results indicated that even after separating data between criminal and civil participants, the results supported a dimensional model of feigned responding. This finding support Rogers (1997) theory that forensic examinees feign along a spectrum, ranging from low to high, rather than fall into a category of pure feigning vs. purely genuine responding.

As it currently stands within the DSM-5, malingering remains a categorical classification. Dimensional versus categorical classification within the DSM is an issue that has been discussed among mental health professionals for many years. Brown and Harlow (2005) discussed several of the proposals for utilizing a dimensional classification system during the development of the DSM-5. The DSM-5 utilizes dimensions within some of its disorders, qualifying some depressive, bipolar, and substance abuse disorders as mild, moderate, and severe. However other disorders, including personality and psychotic disorders, are regarded as categorical (APA, 2015). Much of the opposition against a dimensional diagnostic approach appears to be the implications for measurement within research. It has been argued that a dimensional

approach may result in challenges of prior studies on mental health as such research is based on past classification models and may no longer be considered valid (Brown & Harlow, 2005). Another issue is ensuring reliability among clinicians' diagnoses of commonly feigned psychotic and severe mood disorders. For example, clinicians would need to be re-trained in making diagnoses using the new classification model and would likely require inter-rater reliability to ensure accuracy. Researchers argue that the current classification model for malingering leads to over-diagnosis, when it may be more appropriate to specify behaviors that suggest malingering as opposed to automatically categorizing a patient as malingerers (Brown & Harlow, 2005; Reiger et al., 2013; Wakefield, 2013).

By definition, a person who is malingering is behaving intentionally (APA, 2013; Conroy & Kwartner, 2006) which means it is done with conscious awareness. Therefore, intentionality is a significant factor to address when performing an evaluation in which malingering is suspected. However, unless a patient directly admits to purposeful symptom exaggeration, intentionality is difficult to assess and therefore, it is often inferred by evaluators (Berry & Nelson, 2010). In some cases, it may be difficult to differentiate between exaggerated symptoms and genuine symptoms. The very nature of certain mental illnesses can have a dramatic flair. A clinical example of a mental illness with such a presentation is Borderline Personality Disorder (BPD) which is characterized by marked mood instability and chronic suicidality. Yet, some individuals with BPD may be unaware of their inflated endorsement of symptoms. If such individuals are unaware, or unintentionally exaggerating their symptom severity, they are not malingering. However, an error in evaluators that occurs too often is equating an exaggeration of symptoms with

malingering (Waxman et al., 2009). Rather, patients who are presenting with an inflated symptom presentation may be in a state of personal crisis. Even patients who were once identified as malingering may unintentionally express an exaggerated portrayal of the degree of symptoms objectively present (Merkelbach et al., 2011).

Malingering is an issue that is frequently encountered while working with the forensic population. Malingering is typically categorized into cognitive, psychiatric, or global subtypes (both cognitive and psychiatric). This review will focus solely on psychiatric malingering, i.e., the intentional feigning of psychiatric symptoms within a criminal (as opposed to civil) forensic context. McDermott, Dualan, & Scott (2013) found that of individuals considered Incompetent to Stand Trial, approximately 17% of them were malingering during their initial evaluation, based on an interview and use of data from psychometric measures of malingering. Furthermore, McDermott and colleagues (2013) also reported an alarming 67% of the individuals from the county jail sample malingered in order to be removed from the general population and placed into the jail's psychiatric unit (McDermott, Dualan, & Scott, 2013). An example is an inmate telling jail/prison staff that he is suicidal so that they can be moved from general population to the mental health unit or even to a psychiatric hospital. Rogers (1997) asserted "for every malingerer correctly identified, nearly four times as many *bona fide* patients are miscategorized as malingerers." Given the variety of reported rates of malingering across forensic and correctional settings listed above, the precise number of actual malingerers and falsely accused malingerers is unknown.

Within a forensic population, the nature of an external gain typically includes evading criminal prosecution, evading jail/prison to enter a hospital instead, or obtaining

medication (McDermott, Dualan, & Scott, 2013). If a person is successful at malingering and obtains his/her external gain, the consequences are severe in nature. For example, patients who has committed a serious crime and malingers successfully may not receive a justified sentence and could be released into the community or be placed into a hospital around other vulnerable patients. A person that malingers incompetence to stand trial prolongs the legal process and costs attorneys, the judge, and mental health professionals a significant amount of time, money, and resources. Conversely, incorrectly identifying a patient to be malingering could potentially cause a patient to be denied treatment, taint that patient's reputation, and damage a clinician's rapport with that patient (Conroy & Kwartner, 2006).

In the literature on malingering, Factitious Disorder is often discussed and differentiated from malingering. Factitious Disorder is defined in the DSM-5 (APA 2013) as "Falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception. The individual presents himself or herself to others as ill, impaired, or injured" (pg 324). Unlike malingering, Factitious Disorder is classified as a Somatic Symptom Disorder that generally refers to a mental condition in which a person experiences symptoms of an injury or physical illness that cannot be explained by a general medical condition (APA, 2013). Factitious Disorder is described as deceptive behavior that can occur in the absence of external rewards (APA, 2013). Unlike previous editions of the DSM, the current criteria do not require an inference about intent or possible underlying motivation. These distinctions are imperative to consider while performing an assessment to determine if a person is feigning and/or exaggerating their symptoms. Not only are the resulting consequences of Factitious

Disorder and malingering significantly different from one another, but the clinical implications are very different for each. For example, Factitious Disorder may be treated with pharmacotherapy and other therapeutic interventions. Malingering, however, is not treated because it is not a disorder. Rather, malingering is a behavior that must be identified accurately and addressed appropriately.

CHAPTER 4

THE CLINICAL INTERVIEW

When a clinician is assessing an individual for malingering, a thorough clinical interview and precise behavioral observations are completed prior to the administration of any psychometric tools (Resnick, 1997). Persistent observation of a patient suspected of malingering “is often the best method [of identifying inconsistencies within a patient’s symptoms report,] especially with a defendant who is uncooperative or not communicative at all” (Conroy & Kwartner, 2006). Resnick (1997) proposed several indicators of feigning psychiatric illnesses, particularly psychotic symptoms, in patients. He noted that patients rarely have the stamina to persistently perform in a way that is consistent with the symptoms they are attempting to feign (Resnick, 1997). Individuals attempting to feign may also behave differently when speaking to differing members of a multidisciplinary treatment team. Therefore, he suggested that the evaluator conduct long interviews focused on specific details that require the patient to maintain a consistent report.

Content areas that are typically covered in a clinical interview include but are not limited to: psychiatric history (including reason for admission and family history of mental illness), developmental issues, medical conditions, substance abuse history, trauma and abuse history, education and employment background, family and interpersonal relationships, spiritual and cultural background, legal history. Examples of inconsistent reporting to focus upon include inconsistencies between patient’s behavior in front of a mental health professional, his/her behavior on the unit with other patients, his/her ability to articulately describe his/her persistent state of confusion, and his/her

description of psychotic symptoms that are generally unfounded in other psychotic patients (Resnick, 1997).

While a great amount of information may be gathered from a thorough clinical interview, some experts maintain that an interview is not sufficient for determining whether a person is malingering. Reid (2000) suggested that an interview alone will not be convincing in a courtroom setting because of its subjective nature and that mental health professionals may be biased in selecting which information to support their opinions. Reid (2000) proposes that a clinical interview and behavioral observations must be paired with data from objective psychometric measures in order to formulate a convincing case.

CHAPTER 5

PSYCHOMETRIC MEASURES

Following a thorough interview, the standard protocol is to administer psychometric measures specifically determined by the referral question of each evaluation. The Structured Interview of Reported Symptoms (SIRS) has been recognized as the “gold standard” of malingering assessment measures (Rogers, 2008; Green & Rosenfeld, 2011; Kocsis, 2011). The Structured Inventory of Malingered Symptomology (SIMS), and Miller Forensic Assessment of Symptoms Test (M-FAST) are brief screeners that have also been shown to be useful in identifying malingering (Clark, 2006; Baerber et. al., 1985; Miller, 2005; Merkelbach & Smith, 2001). While these assessment measures have been useful in successfully identifying malingerers, each has their strengths and weaknesses that will be explained in further detail in this comprehensive literature review. Lastly, empirically supported and widely used objective personality assessment measures such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Green, 2010) and the Personality Assessment Inventory (PAI; Morey, 2007) include several validity scales that can assist in whether a patient is putting forth a genuine or false image of him/herself.

The Structured Interview of Reported Symptoms

The Structured Interview of Reported Symptoms- 2nd Edition (SIRS-2; Rogers, Sewall, & Gillard, 2010) is the most recent version of the assessment measure that was originally developed by Richard Rogers in 1982. As noted above, the measure has been acclaimed as the “gold standard” in assessing for psychiatric malingering (Rogers, 2008;

Green & Rosenfeld, 2011; Kocsis, 2011). SIRS-2 is a 172-item interview that categorizes test-takers into *Genuine Responding*, *Probable*, and *Definite* malingerers using a decision tree model. This model indicates that feigning is determined based upon three or more primary scales in the *Probable* range or one or more primary scale in the *Definite* range. The SIRS-2 assesses common feigning behavioral indicators including *Erroneous Subtypes*, *Obvious Symptoms*, and *Reported vs. Observed* (Rogers, Sewall, & Gillard, 2010). To date, the SIRS is the most validated testing instrument used to assess for malingering (Rogers, 1990; Rogers, 1997; Reid, 2000). Psychometric properties of the test include a sensitivity of .80, specificity of .975, and both positive and negative predictive powers of approximately .90 (Rogers, Sewall, & Gillard, 2010). Furthermore, recent studies of the SIRS-2 found that the measure accurately categorized 94.2% of test-takers suspected of malingering (Green, Rosenfeld, Belfi, 2013). The SIRS-2 has been applied to a variety of clinical populations to determine the validity of its use with varying groups.

It is important to note that some forensic patients have intellectual disabilities (ID) (Cooper et al., 2007) which may impact the way in which they respond to items on malingering measures. Petersilia (2010) estimated that approximately four to ten percent of the US prison inmate populations have been diagnosed with some form of an intellectual disability. Intellectual disabilities complicate accurate malingering assessment because of the tendency to over-report psychiatric symptoms in the form of “yea-saying” (Gudjonsson, 2003). For example, patients with intellectual disabilities may respond positively to all questions, regardless of their content, because of a lack of understanding or a desire to please the examiner. Therefore, elevated scores on malingering measures

may not be a valid reflection of the response style of a patient with an intellectual disability.

Prior studies that tested the utility of the SIRS for detecting malingering among patients with ID have yielded mixed and even conflicting results (Hayes et al., 1998; Hurley & Deal, 2010). To further address this issue, Weiss et. al, (2011) administered the SIRS to a group of individuals diagnosed with intellectual disabilities (ID), who were told to respond truthfully and were informed of the purposes of the present study. Approximately 45% of the participants had been diagnosed with at least one comorbid psychological disorder, and 16% of the participants had been diagnosed with at least two comorbid psychological disorders. Comorbid diagnoses included mood, psychotic, impulse control, and personality disorders. None of the participants were suspected of feigning their psychiatric illness. Weiss et al. (2011) found that approximately 40% of the participants were inaccurately classified as feigning when using the SIRS-2 cut-off score of 76. However, when using the SIRS-2 algorithm discussed in the manual (Rogers, 2010), only 7% of the participants were wrongly classified as feigning. In examining specific subscales that marked participants as exaggerating, the Subtle Symptoms (SU) and Severity of Symptoms (SEV) subscales were found to be the only two subscales to classify participants into the “Definite Feigning” category; conversely the SC and IA subscales accurately classified all of the participants as “Honest.” This suggests that the SC and IA scales may be the most sensitive when assessment patients for malingering with comorbid intellectual disabilities, and therefore clinicians need to consider their patient’s intellectual abilities before diagnosing malingering.

Another clinical population that may present with exaggerated symptoms is patients with complex trauma histories. Studies have shown that patients with trauma histories tend to elevate scores on several validity scales of assessment measures, including the MMPI-2 (Rogers et al., 2003; Elhai, et al., 2003; Welburn et al., 2003). These results have significant implications for the assessment of malingering within a forensic setting in that clinicians may falsely categorize patients with trauma histories as malingering. Many patients in a forensic inpatient hospital have complex trauma histories prior to their admission, and are subjected to potential future traumas such as sexual and physical assaults by other inpatients or prisoners given their settings (Beck et al., 2010). These patients may also choose not to report abuse histories to mental health staff because they feel it is irrelevant or are embarrassed (Beck et al., 2010). Clinicians working with patients who typically have trauma histories (e.g., forensic patients with severe mental illnesses, personality disorders, or substance abuse disorders) must consider whether the patient's trauma history is impacting their current presentation and scores on objective malingering measures.

Given prior research highlighting that patients with trauma histories will likely overreport symptoms on malingering measures, Rogers et al., (2009) examined the impact of trauma on patients' performance on the SIRS in an inpatient trauma-specialized program. All participants had significant trauma histories and were randomly assigned into either a simulated *Feigning* group or an *Honest* group. Preliminary results indicated that approximately 31% of *Honest* responders were incorrectly classified as feigning. In an attempt to account for artificially inflated scores of *Honest* responders, Rogers et al., (2009) created the Trauma Index (TI, cut score >6). This scale was formed by combining

the IA, SC, and RO scales of the SIRS-2, as those scales were not significantly elevated in this sample. Participants, regardless of assigned group, were then classified as feigning only if their scores met the standardized administration SIRS decision tree model and elevated the TI score. The SIRS-2 scores with and without the inclusion of the TI were subsequently compared. Results indicated that the inclusion of the TI scale significantly increased the ability of the SIRS-2 to accurately classify trauma patients as either feigned or genuine responders.

The SIRS (Rogers, 1992) was validated on an English-speaking population, which limits its application to patients who are fluent in English. Given cultural and racial differences among forensic populations, it is necessary to determine whether the SIRS can be utilized with populations that are ethnically different from the validation sample. A study on the validation of the Spanish version of the SIRS found that it was able to accurately identify feigned response styles, yielding very large effect sizes of $d > 1.50$ (Correa, Rogers, & Hoersting, 2010). The same study also found that the Spanish SIRS was able to account for acculturation issues, as there were no significant differences in the ability of the SIRS to detect malingering Mexican-American individuals than from the English-speaking normed population (Correa, Rogers, Hoersting, 2010). A limitation of this study, however, is that this study was conducted with a community outpatient Hispanic sample. Therefore, it remains unknown as to whether the above findings would apply to a forensic or correctional Hispanic sample.

Miller Forensic Assessment of Symptoms Test

Despite the positive psychometric properties of the SIRS-2, it has an administration time of approximately 45 minutes that may not be ideal for clinicians completing time-limited evaluations. As such, The Miller Forensic Assessment of Symptoms Test (M-FAST; Miller, 2001) was created as a successful brief screener for identifying feigned psychiatric symptoms in adults 18 years and older. It consists of the following seven scales: Reported vs. Observed (RO), Extreme Symptomatology (ES), Rare Combinations (RC), Unusual Hallucinations (UH), Unusual Symptom Course (USC), Negative Image (NI), and Suggestibility (S). The M-FAST has a brief administration time at approximately 10 minutes and is significantly shorter than that of the SIRS, which takes roughly 45 minutes to administer. A total score of 6 or greater is recommended as the cut off score for highly suspected malingering, as recommended by the measure's manual and utilized by most clinicians (Miller, 2001). Miller specifies that the M-FAST should be used as a screener to facilitate in determining whether a full malingering assessment is warranted. This measure has been validated with patients in several different settings including prisons, forensic inpatient hospitals, outpatient disability clinics, and civil inpatient hospitals. The M-FAST is ideal for clinicians working in settings where time is limited and/or the patient population is incapable of being examined for a lengthy period of time.

Studies on the M-FAST have shown that it is a valid assessment screener for malingering and has utility across varying racial backgrounds (Miller, 2005). Guy & Miller (2004) found that the M-FAST yielded equivalent classification accuracy across Caucasian and African American correctional inmates. However, there were notable

limitations in this study in that the sample size was fairly small (n= 44) and only included Caucasian and African American participants. In order to expand the utility of the M-FAST, Miller (2005) conducted two studies to determine if the MFAST is equally applicable to psychiatric and forensic patients across varying racial backgrounds with differing literacy abilities. In Study 1, the generalizability of the M-FAST to individuals of varying literacy levels and racial backgrounds was examined in a sample of 280 male psychiatric patients. Study 2 used a sample of 50 forensic male patients and included procedures nearly identical to those from Study 1 with the exception that it used only the 25 final items of the current version of the M-FAST. This procedural change allowed examiners to apply the suggested cut-off score of 6 for the M-FAST to determine its generalizability.

For both studies, participants were administered the M-FAST, the SIRS, the M Test, and then the MMPI-2. Next, participants were divided into literate vs. illiterate groups based on their ability to read and comprehend items on the M Test and the MMPI-2. Participants were then categorized into honest vs. feigned response style based on their scores on the SIRS. Clinical members of the hospital unit treatment teams, psychologists and psychiatrists, submitted their clinical opinion of each study participants as to whether that patient was malingering or not, and then assessed their level of certainty regarding their clinical judgment. Results indicated that there were no significant differences across literacy or racial groups in M-FAST utility. The cut off score of 6 yielded minimal false positives and only one false negative (Miller, 2005). Lastly, the M-FAST was more successful at correctly classifying participants into responding groups than was the M Test or clinical judgment alone. Overall, the results of this general study suggest that the

M-FAST is a useful screener for feigned psychiatric symptoms in a forensic population, regardless of patients' literacy status or racial background.

In line with the research on distinct factors within the SIRS, Vitacco and his colleagues (2008) investigated the composition of the M-FAST in forensic patients using a factor analysis. The 244 patients were of varying demographic backgrounds and enrolled in either competency restoration treatment or were undergoing insanity evaluations. Findings were then cross-validated on a different sample of 210 forensic patients. Results indicated that all 25 items of the M-FAST loaded positively on a single malingering factor (CFI=.98, TLI=.99). The cross validation results also supported a single factor loading for the M-FAST items. Vitacco (2008) and colleagues subsequently compared this single MFAST factor with the two distinct factors of the SIRS (Rogers et al., 2005). Findings showed that the single MFAST factor was more strongly correlated to the *Spurious Presentation* factor of the SIRS, which measures strange or incongruent psychiatric symptoms. Given the correlation between the MFAST single factor and the *Spurious Presentation* factor, Vitacco and his colleagues (2008) imply that the MFAST is likely better at identifying feigning of odd symptom presentations. These findings are consistent with the description of the development of the measure as outlined by Miller (2005) in the M-FAST manual.

Despite the growing number of Hispanic individuals within the forensic/correctional system, few malingering measures have been validated with Spanish speaking populations. To address this limitation, Montes & Guyton (2014) examined the psychometric properties of a Spanish version of the M-FAST in comparison to the English version with incarcerated Hispanic men. In a sample of 102 Hispanic men, the

results indicated similarly high internal reliability for the MFAST total score and across subscales. The Spanish MFAST was also able to accurately classify participants into a group of either likely feigned or genuine response styles. Lastly, their results indicated a strong language equivalence component between the English and Spanish versions. Therefore, the Spanish version of the MFAST shows promise as an equally effective screen for malingering as compared to its English counterpart.

In addition to validating the Spanish version of the MFAST, Montes & Guyton (2014) suggested that clinicians consider a lower cut-off score than that which is recommended in the MFAST manual. The MFAST manual recommends a cut off score of 6 in determining feigning classification. However, Montes & Guyton (2014) found that a cut off score of 5 or higher for the MFAST yielded higher rates of specificity and sensitivity than a cut off score of 6. Specifically, they found that a cut off score of 5 correctly identified 93% of feigning participants. The implications of these findings suggest that clinicians should also suspect feigned response styles when patients produce scores of 5 and greater on the MFAST.

Structured Interview of Malingered Symptomatology

A less commonly used malingering measure is the Structured Interview of Malingered Symptomatology (SIMS). The SIMS (Smith & Burger, 1997) consists of 75 true-false questions which comprise the following five scales: Psychosis (P), Neurologic Impairment (NI), Affective Disorder (AF), Amnestic Disorders (AM), Low Intelligence (LI), along with the total score. One of the primary advantages of the SIMS is that its scales are intended to assess different facets of feigned psychopathology and cognitive

impairment, and were developed based on prior research. Therefore, it is a useful assessment for patients who are globally feigning. These are individuals who are feigning both cognitive and psychiatric symptoms as opposed to one or the other.

The usefulness of the SIMS to identify psychiatric malingering has been found to be limited, as compared to other malingering measures. Edens, Poythress, and Watkins-Clay (2007) examined the efficacy of the SIRS, PAI, and the SIMS in sample of male prisoners. Specifically, the aim of the study was to determine whether the SIMS could be used a sufficient measure for identifying feigning in a setting that often does not allow for the approximately forty-five minutes it takes to administer the SIRS. By contrast, the SIMS takes approximately 15 minutes to administer and could be used by in settings where lengthy assessments are not feasible, whether for safety or other clinical reasons. For example, a patient may be behaving physically aggressive and therefore is not appropriate for a lengthy assessment. Results showed that the SIMS alone yielded an overall predictive rate of 69% indicating that participants are accurately classified by the SIMS as either feigning or genuine nearly seven out of ten times. Results also indicated that the SIRS, SIMS, and PAI were not as effective as identifying feigned response styles from participants who were actually feigning, as opposed to participants instructed to feign. Furthermore, results indicated that the cut off score of 14, as recommended by Smith & Burger (1997), yielded several false positives. As such, Edens and his colleagues recommend that clinicians continue to use a two-step process in making clinical decisions regarding malingering. They support the use of the SIMS, but do not recommend that it be used on its own to determine whether a patient is feigning (Edens, Poythress, & Watkins-Clay, 2007).

In another study comparing the SIMS to other malingering measures, Vitacco, Rogers, Gabel, & Munizza (2007) sought to determine the effectiveness of several malingering measures in successful feigning among a male population within a forensic inpatient facility. The M-FAST, SIMS, and the Evaluation of Competency to Stand Trial-Revised (ECST-R) Atypical Presentation (ATP) scale were compared in this study, with the SIRS used to initially classify participants into probable malingerers or non-malingerers based on their scores. The results indicated that the M-FAST yielded excellent internal consistency (Cronbach's alpha = .91) whereas individual subscales had fairly low internal consistency. The SIMS also demonstrated excellent internal consistency (Cronbach's alpha = .96), with mostly good internal validity, with the exception of the Affective Disorders (Af) scale. Lastly, the ECST-R ATP scale yielded adequate internal consistency (Cronbach's alphas ranging from .72-90). Vitacco and colleagues (2007) concluded that despite its psychometric strengths, the M-FAST has a heavy emphasis on feigned psychotic symptoms and may not be as useful for patients who were feigning symptoms of mental illnesses other than psychotic disorders. As such, the SIMS may be more useful in identifying presentations of feigned symptoms other than those of a psychotic nature (Vitacco et al., 2007).

Results from the Vitacco et al., (2007) study also indicated that in general, the SIMS has lower Positive Predicting Power (PPP) than the M-FAST. This information is relevant when determining whether to use the SIMS with a forensic population to identify malingering in comparison to the M-FAST. Because the M-FAST and the SIMS are both malingering screeners that are relatively quick to administer, they are easily compared. Overall, it appears that the M-FAST is the most successful malingering screener and can

be used in a variety of settings to determine the possibility of feigning (Vitacco, Rogers, Gabel, & Munizza, 2007).

Minnesota Multiphasic Personality Inventory-2

The Minnesota Multiphasic Personality Inventory-2 (MMPI-2) is an extremely well-known and frequently used measure for the assessment of psychopathology (Butcher, Williams, Graham, Tellegen, & Kaemmer, 1989). This is a 567-item measure that can yield a plethora of information across a number of validity and clinical scales. Symptom validity and the MMPI-2 have been examined extensively as indicated by the numerous peer-reviewed articles and books on such topics. Of the validity scales, the Infrequency (F), Infrequency-Back (Fb), Infrequency Psychopathology (Fp), Fake Bad Scale (FBS), and Response Bias Scale (RBS) are most commonly used scales to determine whether a person is exaggerating/feigning the severity of objectively present psychological symptoms. Specifically, the F scale consists of items infrequently endorsed by the standardization sample and the Fp scale includes items infrequently endorsed by psychiatric patients within the standardization sample (Green, 2010). The F and Fp scales have been found to be useful in distinguishing profiles of individuals with genuine representations of themselves from individuals with exaggerated and atypical responses (Archer et al., 2001; Green, 1997; Rogers & Bender, 2004). Given such findings, the F and Fp scales are generally acclaimed as the most useful in identifying feigned/exaggerated profiles (Steffan, Morgan, Lee, 2010). The Fake Bad Scale (FBS) and the Response Bias Scale (RBS) are most frequently used to identify feigned somatic

injury complaints and feigned cognitive impairment, respectively, and therefore are not discussed in detail in this review.

More recently, the Malingering Discriminant Functioning Index (M-DFI; Bacchiochi & Bagby, 2006) has been developed as an index generated from the items on the MMPI-2 in order to highlight response styles consistent with malingering. The M-DFI was created by mathematically manipulating raw scores from all of the 17 clinical and content scales (Toomey, Kucharski, & Duncan, 2009). Validation studies of the index suggested good results for its use in detecting malingering (Bacchiochi & Bagby, 2006); however, others have found that the ability to accurately detect malingering in a forensic population is relatively poor (Toomey, Kucharski, & Duncan, 2009). These mixed results of the M-DFI further support the use of the classic F, Fb and Fp validity scales for the identification of malingering (Steffan & Morgan, 2008; Toomey, Kucharski, & Duncan, 2009).

In addition to the classic validity scales, the Criminal Offender Infrequency Scale of the MMPI-2 (Fc; Megargee 2004) was developed after findings suggested that non-malingering forensic patients may also tend to produce elevations on the F and Fp scales. The Fc scale is comprised of items that are infrequently endorsed by test-takers with a significant legal history, which is similar to the development of the Fp scale and psychiatric patients. Megargee (2004) found that individuals with a history of incarceration and criminal lifestyles had a tendency to yield elevated scores on both the F and Fb scales. Therefore, the Fc scale was constructed to account for the impact of incarceration on test takers' responses and criminals who respond genuinely to items are expected to *not* show elevations on this scale (Megargee, 2006). The utility of this scale

has been found to be more useful than the Fp and Fb scales and similarly effective as the F scale in detecting malingering in one forensic sample (Toomey, Kucharski, & Duncan, 2009).

Research has also examined optimal cut off scores for the Fc and the Fp validity scales for identifying feigned response styles. In a study of MMPI-2 response styles of federal prisoners undergoing forensic evaluations, Gassen et al. (2007) compared the utility of several different MMPI-2 validity scales in accurately detecting feigning, including the F, Fb, F, Fake Bad Scale (FBS), as well as other MMPI-2 validity scales. Using the SIRS to categorize participants into feigned vs. genuine responders, they determined that an Fc score > 14 yielded the highest accurate hit rate (.995) and highest sensitivity and specificity in comparison to the other scales. The Fp scale yielded the lowest hit rates, equivalent to .833 (Gassen et al, 2007). As such, when conducting malingering evaluations with criminals, it appears that the Fc can be useful in identifying feigned response styles. However, it is not one of the classic validity indices of the MMPI-2 and has not been as widely researched as the other validity scales.

The MMPI-2 Restructured Form (MMPI-2-RF; Tellegen, & Ben-Porath, 2008) was developed based on prior research examining the MMPI-2. It is significantly shorter than the MMPI-2, and utilizes psychometrically sound Restructured Clinical scales. Other research has been conducted to investigate the effectiveness of the MMPI-2 RF validity scales in distinguishing between feigned and genuine response styles. Specifically, Rogers and colleagues (2011) measured the utility of the MMPI-2 RF in accurately classifying feigned mental disorders (FMD), feigned cognitive impairment (FCI) and genuine responding in a forensic sample comprised largely of individual undergoing

disability evaluations. Furthermore, Rogers et al. (2011) sought to determine optimal cut-off scores for these scales to accurately differentiate between FMD and genuine responding. It was predicted that Fp-r would be the most sensitive measure of feigning, given that its items are fairly independent from one another with only 5 overlapping items with another Revised Clinical (RC) scale as well as its utilization of a genuine rare-symptom detection strategy (Rogers, 2008a, b). This development strategy makes it so that the items on the Fp-r scale are not typically endorsed, even by test-takers with known severe psychopathologies. Therefore, an elevation on the Fp-r scale is more indicative of feigning as opposed to severe pathology. Research on optimal cut-off scores for Fp-r has yielded varying results. For example, Rogers et al. (2011) determined that an Fp-r T score of 90 yielded an excellent false positive rate of only 1% for participants within the FMD group. However, in another study on the use of the Fp-r in identifying malingering, Sellbom et al. (2010) suggested that an Fp-r T score >110 is an ideal cut off score. Rogers and his colleagues (2011) concluded that the MMPI-2 RF validity scales, superficially the Fp-r scale, is useful in distinguish feigned response styles and should be used by clinicians to determine whether a full malingering evaluation is warranted.

Personality Assessment Inventory

The Personality Assessment Inventory (PAI; Morey, 1991) is a test that assesses an individual's personality structure as well as degree of current psychopathology. The PAI has three scales designed to detect feigning among test responders that includes the Negative Impression scale (NIM), the Malingering Index (MAL), and the Rogers Discriminant Function (RDF). The NIM scale is comprised of items that are infrequently

endorsed by the clinical and nonclinical normal standardization samples with the intent to identify test-takers that are presenting themselves in an overly negative manner. The MAL is used to identify over-reporting of symptoms by providing eight profile features that are commonly seen in test-takers who are feigning. Unlike the NIM and MAL, the RDF index was developed by Richard Rogers (1996) and was added into the PAI following its original development. The index uses scores from several clinical scales within the PAI to categorize test-takers into feigning versus non-feigning groups.

Studies have provided research support for using the NIM, MAL, and RDF scales of the PAI to successfully identify malingering (Rogers, Gillard, & Wooley, 1996; Morrey, 1993) among individuals who are coached regarding the validity scales and individuals who are not coached (Hawes & Boccaccini, 2009). However, as with other assessment measures, research on the NIM, MAL, and RDF scales have been mixed. Some researchers have argued that the NIM can distinguish malingerers from non-malingerers, which is not the case for the MAL or the RDF (Kucharski, Toomey, Fila, & Duncan, 2007). The NIM scale of the PAI is a validity scale that has been found effective for determining whether test-takers are attempting to portray themselves in a more pathological light (Calhoun, Earnst, Tucker, Kirby, & Beckham, 2000; Morey, 1991; Morey & Lanier, 1998; Rogers, Ornduff, & Sewell, 1993). Given an overlap of items between the NIM and the PAI clinical scales, elevated scores on the NIM also yield elevated clinical scale scores (Morey, 1991). Hopwood, Morey, Rogers & Sewell (2012) found that for individuals who were provided with symptom coaching in order to feign specific disorders, the clinical scale associated with their feigned disorder will be elevated even higher than expected scores based on their NIM scale scores. They used the

discrepancy between the predicted clinical scale score (based on NIM elevations) and the actual score produced by feigned protocols to classify patients who are malingering, *and* identify which pathology is being feigned. Results of the study also showed effect sizes of using the NIM to identify malingered pathologies to be optimal when the discrepancy scores between observed versus predicted clinical scales was greater than or equal to 10 T scale points (Hopwood, Morey, Rogers & Sewall, 2012).

Despite the research support for using the Rogers Discriminant Function index (RDF) as a measure of feigning, it has been argued that the RDF is *not* an appropriate tool for identifying malingering in a forensic or correctional population. Instead, the RDF is viewed as being highly applicable to non-forensic patients suspected of feigning (Rogers et al., 1998). Rogers and his colleagues (1998) found that the RDF was only able to correctly classify 61% of participants from a forensic population. In this same study, Rogers et al., (1998) suggested that the NIM scale greater than or equal to 77T was the most effective measure of feigning for a forensic population. This T score yielded a sensitivity rate of .84, meaning that approximately 84% of the participants who were actually malingering were correctly identified by the RDF as engaging in such behavior.

Previous research has also indicated specific ideal cut off scores for which the NIM and MAL indexes are considered to be the most successful at identifying feigning (Morey, 1997; Hawes & Boccaccini, 2009). More specifically, a score of greater than 77 for the NIM scale (average sensitivity and specificity rates of .75 and .77, respectively) and greater than or equal to 3 on the MAL (average sensitivity and specificity rates of .58 and .86, respectively) scale have yielded the most successful rates of accurately detecting malingering (Hawes & Boccaccini, 2009). In addition to the NIM, MAL, and RDF of the

PAI, the Multi-scale Feigning Index (MFI; Gaines, Giles, & Morgan, 2013) was developed to detect malingering. The MFI was created by averaging scores from seven of the total eleven clinical scales that span a variety of diagnostic categories including mood, anxiety, and psychotic disorders. The MFI has been found to be more successful in accurately detecting response styles consistent with malingering when compared to the NIM, MAL, and RDF scales (Gaines, Giles & Morgan, 2013).

Although the PAI validity scales (NIM, MAL, RDF, and the MFI) have been shown to be effective in detecting over reporting, research has shown that trauma histories within patients falsely inflate their scores on malingering measures and objective personality measures such as the PAI. In line with prior research on the SIRS with trauma patients (Rogers et al., 2009), Rogers et al., (2012) sought to determine whether the same traumatogenic effects found on the SIRS would be upheld on the PAI validity scales and indices NIM, RDF, and MAL. This study administered the SIRS to patients with trauma histories at an inpatient program. In contrast to the results from previous research, Rogers et al. (2012) found that the RDF and the MAL indexes of the PAI were not elevated from genuine responding trauma patients. Results suggested using a cut off score of greater than or equal to 70T for RDF in order to accurately classify feigning vs. honest response styles. It is unclear why traumatogenic effects were found for the SIRS and not the PAI. One potential explanation is that the SIRS is designed purely to detect feigned response styles while the PAI is an objective psychological measure that can specifically measure trauma, along with other psychological issues.

Evaluation of Competency to Stand Trial-Revised

Malingering may commonly present in a variety of forensic cases, including patients adjudicated incompetent to stand trial. As such, some assessment measures that are used to help determine whether a patient is incompetent contain malingering scales. A common forensic issue is whether a pretrial defendant is incompetent on stand trial due to a mental illness. Research suggests that 10-15% of pretrial cases are related to issues of competency (Melton, Petrila, Poythress, & Slobogin, 2007). Of these cases, it has been estimated that 10% (Cornell & Hawk, 1989) to 29% (Boccaccini, Murrie, & Duncan, 2006) of pretrial defendants attempt to feign the severity of their psychiatric symptoms to avoid going to trial or avoid jail.

Assessments have been developed to assist evaluators in validly determining the level of a patient's legal knowledge, ability to make legal decisions, and their ability to rationally work with their attorney to prepare their defense. For example, the Evaluation of Competency to Stand Trial- Revised (ECST-R; Rogers, Tillbrook, et al., 2004) assesses whether an individual has negative attitudes that would preclude them from being able to work with their attorney, as well general knowledge of the courtroom and trial process. The ECST-R scales include Factual Understanding (FAC), Rational Understanding (RAC), and Ability to Consult with Attorney (CWC). A benefit of using the ECST-R over other competency assessment measures is that the ECST-R includes Atypical Presentation (ATP) scales used to screen for malingered competency, which help clinicians determine whether a full malingering evaluation is necessary. Specifically, the ATP scale includes a list of items with bizarre content that most patients, even psychotic patients, would not endorse. Endorsement of these items suggests that a patient

is purposefully exaggerating the severity of their psychiatric condition. In validation studies of the ATP scales, Vitacco, Rogers, Gabel, and Munizza (2007) found that the scales' negative predicative power ranged from .95 to .98, with sensitivity ranging from .66 to .78.

The use of the ECST-R to assess competency to stand trial is beneficial in also beneficial in screening for feigning. Vitacco, Rogers, and Gabel (2009) specifically examined the psychometric properties of the ECST-R for accurately identifying feigning in a forensic sample. Results indicated that the ECST-R ATP scales had good convergent validity with several of the SIRS primary scales. Correlation coefficients between the ECST-R ATP scale and scales from the SIRS ranged from .50 to .70, indicating that the ATP scale is moderately comparable to the SIRS in identifying psychiatric feigning. Specifically, the ATP-I scale, a subscale assessing the severity of impairment experienced, had a significant correlation with the SIRS SEV (Symptom Severity) scale ($r = .60$). Overall, Vitacco, Rogers, and Gabel (2009) concluded that the most pretrial defendants with questionable degrees of competency to stand trial due to a mental illness are able to feign the severity of their incompetency within the moderate to severe range. These findings suggest that, at the very minimum, malingering screens should be performed on all patients presenting with issues regarding to their competency to stand trial.

In sum, a significant amount of research has focused on the use of psychometric tools in identifying malingering. Overall, the SIRS continues to be the gold standard in malingering assessment, but can take upwards to 45 minutes to administer. There are several conflicting results that do not allow for strong consensus on which of the

available malingering measures have the strongest psychometric properties. Also, research has yielded varied results on optimal cut-off scores for validity scales of objective personality assessment measures. Even the most valid and useful assessment measures fail to specifically identify an external gain of feigning patients, and therefore are not sufficient in identifying malingering (McDermott, 2012). Given the complexity of the malingering assessment process, it is critical that an evaluator explore all possible explanations of testing results and patient behaviors in order to avoid incorrectly classifying and potentially stigmatizing a patient as a malingerer (Waxman et al., 2009).

CHAPTER 6

FACTORS INFLUENCING SUCCESSFUL MALINGERING

Little research has focused on how individuals are able to successfully malingering and evade detection. In an effort to identify specific strategies used by successful malingerers, Edens et al. (2010) encouraged non-mentally ill college students to feign mental illness without being identified. Results indicated that approximately 11% of participants were able to successfully feign mental illness without being classified as engaging in this behavior. On average, the successful feigners endorsed a level of psychopathology that was significantly less than detected feigners, yet still severe enough to be considered a significant level of pathology. Interestingly, successful feigners were *not* more motivated towards success nor were they more self-confident in their abilities to go undetected than were other participants. Specific strategies employed included avoiding endorsing “extreme” symptoms as well as pulling from personal experiences with mental illness (Edens, et. al., 2001). Streicher (1991) found that individuals who are modeling their feigned presentation after a genuinely mentally ill person with whom they are familiar are typically more successful than those attempting to feign randomly. In general, knowledge of psychopathology, which is readily available to any individual, allows for intentional feigning to go undetected (Viglione, 2001; Bagby et al., 1997; Bagby et al., 2002).

“Coaching” from legal representatives has also been shown to significantly impact an individual’s abilities to successfully malingering (Storm & Graham, 2000). Coaching is defined as legal representatives informing test-takers, typically their clients, about the purpose of malingering-specific measures, validity indices, and how to avoid

over-endorsement of symptoms. According to Powell, Gfeller, Hendricks, and Sharland (2004), coaching has been categorized into symptom coaching and test coaching. Symptom coaching refers to a client's attorney informing him/her of specific symptoms associated with certain mental illnesses. In contrast, test coaching occurs when an attorney informs his/her client about properties of assessment measures to assist them in evading detection. Rogers, Bagby, & Chakraborty (1993) found that coaching on specific symptoms that are typically present in certain psychopathologies, as well as coaching about details of the tests administered, significantly increased the likelihood of successful malingering. Studies on the use of the MMPI-2 for identifying malingering have indicated that test-takers who are coached by legal representatives on the MMPI-2 F, Fb, and Fp scales can manipulate their responses to produce results suggesting severe pathology but not overly exaggerated pathology (Storm & Graham, 2000). While coaching from legal representatives strikes some as unethical, attorneys and law students have contrarily reported feeling ethically obligated to inform their clients about the nature of psychological evaluations, common symptoms associated with severe mental illnesses, and psychometric measures (Corrigan, 1995). Coaching presents a significant issue for psychologists given that it may strongly influence the results provided by test-takers during forensic evaluations.

Research has indicated that a patient's type of mental illness that they are attempting to feign will impact the way in which they are able to use coaching to be more successful at feigning compared other individuals. Veltri & Williams (2012) examined whether the type of mental illness feigned was a moderator of the relationship between the impact of coaching and results of the MMPI-2 and the PAI validity scales in college

students. In this study, coaching was operationally defined as a participant being provided with information about symptoms associated with a specific mental illness as well as information on validity scales of the MMPI-2 and PAI. Participants were randomly assigned to coached and Uncoached Schizophrenia, coached and Uncoached Post Traumatic Stress Disorder (PTSD), and coached and Uncoached Generalized Anxiety Disorder (GAD). In the coached conditions, they were instructed to feign the corresponding mental disorder and provided guidance on doing so. All participants were administered the MMPI-2 and the PAI twice: once genuinely and once with the instructions to feign their respective mental illness. Coached groups also received symptom information and details regarding the validity scales of each measure. Results indicated that participants who received coaching produced significantly lower scores on both the MMPI-2 and PAI validity scales than those who were not coached.

With regards to the impact of coaching for specific disorders, Veltri & Williams (2012) found that coaching had the greatest effect for participants in the GAD condition. Participants in the Schizophrenia conditions were more easily detected than those in the PTSD or GAD conditions, suggesting that PTSD and GAD are easier to feign without being detected than is Schizophrenia, regardless of coaching. However, a study limitation is that feigning was identified by PAI and MMPI-2 validity scale scores that yielded invalid profiles. Therefore, validity scale scores that were significantly elevated but still not within the valid range were not categorized as a product of feigning.

Jelicic, Ceunen, Peters, & Merckelbach (2011) studied whether two commonly administered malingering measures, The Test of Memory Malingering (TOMM) and the Structured Inventory of Malingered Symptomatology (SIMS) were able to accurately

identify feigned response styles regardless of participants receiving symptom coaching, or a combination of symptom and test coaching. This study included a control group who were told to respond genuinely, a group that received information on cognitive symptoms related to traumatic head injuries, and a group that received the same symptom information in addition to information on the tests that they would be given and how to successfully “fake” the tests. Given that this literature review is based on psychiatric malingering and the TOMM is a malingering measure of cognitive functioning, the results related to the SIMS will be discussed because it can be used to detect psychiatric feigning. Results indicated that there were no false positives, specifically that none of the participants in the control group were classified as feigning. The SIMS test scores accurately classified feigning for 93% of symptom-coached participants and 86% of symptom/test-coached participants. There were no significant difference between the symptom and the symptom/test groups. Also, the results suggest that the accuracy of the SIMS in detecting feigned responses is not significantly impacted by coaching, despite the 14% of participants within the combination group that went undetected.

As noted previously, the DSM-5 indicates that malingering should be suspected whenever working with a patient diagnosed with Antisocial Personality Disorder (APA, 2014). A personality disorder is identified as a characterologically maladaptive manner of relating to others. Antisocial Personality Disorder is a particularly stigmatized diagnosis and the diagnostic criteria include characterological lying, problems with authority, deception, rule-breaking, and decreased amenability to treatment. Therefore, it is understandable why malingering would be associated with this particular diagnosis, given

the proclivity for deception. However, studies have yielded varying results regarding the actual likelihood of malingering in patients diagnosed with APD.

Research examining the relationship between APD and malingering has also been applied to commonly used personality measures. Kucharski and colleagues (2006) studied the SIR-S, MMPI-2, and PAI in forensic patients diagnosed with APD, patients with a personality disorder other than APD, and patients without a personality disorder diagnosis. The MMPI-2 and the PAI are two commonly used objectively personality measures that both contain validity scales that can be used to help determine whether a patient is feigning. Results indicated that the participants diagnosed with APD scored significantly higher on MMPI-2 Infrequency (F), Psychiatric Infrequency (Fp), and F-K validity scales, as well as the PAI Negative Impression Management (NIM) index and the SIRS-2 overall score. However, despite their significantly higher scores, less than half of the participants diagnosed with APD were classified as malingering. These findings indicated that although patients with APD may not present themselves in an entirely genuine manner, their diagnosis of APD alone is not enough to strongly suspect malingering.

In a similar study, Pierson and colleagues (2011) administered the SIRS-2 to forensic patients diagnosed with APD. They also asked clinicians to provide an estimate of whether the participant was feigning based upon clinical judgment alone. Results indicated that participants were not more likely to produce scores that exceeded the SIRS cutoff, nor were they more likely to be identified by clinicians as malingering. Taken together, these studies suggest that despite the long-standing relationship between APD and malingering as outlined in the DSM-5, malingering should not be considered more

likely among patients with APD than patients with other diagnoses in a forensic context. It is possible that the description from the DSM may lead to higher rates of falsely categorized malingering in patients diagnosed with APD who are demonstrating genuine symptoms.

General intelligence has been identified as a factor that may contribute to a person's ability to malingering and go undetected. Pelfrey (2004) studied the relationship between an individual's Intelligence Quotient (IQ) as measured by that person's scores on Wonderlic intelligence test, his/her knowledge of the MMPI-2 and its validity indices, and his/her ability to put forth a severe representation of mental illness without being classified as feigning. The results indicated that individuals with higher IQs as well as knowledge of the MMPI-2 were able to successfully feign on the MMPI-2. However, there was a significant amount of overlap between knowledge of the MMPI-2 and the participant's IQ, suggesting that IQ more than knowledge of the MMPI-2 influenced the person's ability to feign successfully. Most importantly, the results of this study suggest that an individual with a higher IQ may be able to successfully malingering and avoid detection.

Research has also examined the role of intelligence in malingering assessment. Overall, higher IQ and greater knowledge about mental health increases an individual's ability to malingering successfully. Steffan, Kroner, & Morgan (2007) investigated the impact of intelligence and knowledge of mental health symptoms on the ability of correctional inmates to successfully feign varying mental illness profiles. The validity indices of the Basic Personality Inventory were used to detect dissimulated response and the Shipley Institute of Living Scale (SILS) was used as a measure of intelligence. Half

of the participants in the malingering group condition were then provided with a list of symptoms and their descriptions of specific disorders including Psychotic Disorder Not Otherwise Specified, Post Traumatic Stress Disorder, or Somatoform Disorder, as described in the DSM-IV. Results indicated that the BPI was more adept at correctly identifying feigning than it was for socially desirable response styles. Knowledge of specific symptomatology did not increase participants' abilities to mangle successfully. Furthermore, results indicated that generalized intelligence did not impact the participants' ability to use symptom information in order to evade feigning detection, but there was a significant relationship between higher intelligence and the ability to feign successfully. It should be noted that both the BPI and the SILS are not commonly used assessment measures in forensic settings. Yet, overall, these results support the notion that individuals with greater intelligence may be more successful at evading feigning detection, but knowledge of the pathology which is being feigned does *not* increase chances of successful feigning (Steffan, Kroner, & Morgan, 2007).

Additional forms of intelligence other than an individual's IQ, including emotional and social intelligence, can also impact one's ability to evade malingering detection. Grieve and Mahar (2010) studied the impact of emotional and social intelligence on ability to feign psychiatric symptoms. In this study, emotional intelligence was defined as an individual's awareness of their own and others' emotions as well as the ability to regulate and make use of their emotions. In contrast, social intelligence was described as a person's to read social situations and accurately determine the actions to take in response to such situations. Results indicated that participants were able to successfully feign mild, severe, and zero depressive symptoms, but that the emotional,

social, and generalized intelligence of each participant did *not* impact their ability to feign successfully. However, these findings should be interpreted with caution given that the measures used have not been investigated in malingering research before and do not contain validity measures. Additionally, the sample size was small (n=48), and the correlations found between intelligence types and faking ability were relatively small.

In a second study, Grieve and Mahar (2010) examined the relationship between psychopathy, emotional intelligence, and socially-desirable responding in college students. Socially desirable responding has been found in individuals who are dissimulating their response styles, also known as “faking good” (Grieve & Maher, 2010). Although dissimulation is entirely different from malingering, the purpose of dissimulation is similar to malingering in that it includes intentionally altering response styles in order to achieve some external gain. As such, these studies are relevant to this review in that they address factors influencing disingenuous response styles. Results indicated that emotional intelligence was not positively correlated with a socially desirable response style. However, emotional intelligence was significantly negatively correlated with psychopathy. Grieve & Mahar further indicated that given the lack of positive correlation between emotional intelligence and socially desirable responding, the negative correlation between emotional intelligence and psychopathy is not simply due to “the pro-social nature” of emotional intelligence.

Study findings by Grieve and Mahar (2010) can be applied to directions for further research given the DSM-5 lists a diagnosis of Antisocial Personality Disorder as a risk factor for malingering. Although psychopathy and Antisocial Personality Disorder are two separate constructs, they overlap in some aspects. For example, psychopathy is

generally understood as two major factors: interpersonal personality traits of callousness and lack of empathy, and antisocial behaviors including criminal backgrounds, history of juvenile offenses, and irresponsibility (Hare, 2003). As such, an individual who demonstrates the antisocial character traits of psychopathy listed above *may* be more likely to mangle than an individual who demonstrates more of the interpersonally psychopathic personality.

Despite the link between Antisocial Personality Disorder, malingering, and psychopathy discussed above, limited research has studied the relationship between psychopathy and malingering. Kucharski and colleagues (2006) examined psychopathy and feigned psychopathology in patients within a forensic setting. Specifically, they divided participants into three categories of psychopathy levels: low, moderate, or high, as determined by their score on the PCL-R. These groups were then compared with the results of over-reporting indexes of the MMPI-2 and the PAI as well as the SIRS total score.

The high psychopathy group scored significantly higher on the F, F-K, Fb, and F(p) validity scales of the MPPI-2, and the NIM scale of the PAI as well as the SIRS total score. However, although participants high in psychopathy generally scored higher on the feigning measures, a significant portion of the high psychopathy group *did not* exaggerate their scores. Kucharski et al. (2006) noted that given psychopathy is associated with malingering, clinicians may be likely to employ a confirmatory bias and therefore are more likely to inaccurately categorize psychopathic patients as feigners. Thus, a thorough malingering assessment should be carried out to confirm or rule out feigning, regardless of the presence of psychopathy.

In a similar study, Marion and colleagues (2013) examined whether individuals higher in psychopathy levels were better able to avoid feigning detection in two studies with college students. In Study 1, participants' psychopathy levels were assessed using the Psychopathic Personality Inventory-Revised (PPI-R), Triarchic Psychopathy Measure (TriPM), and the Levenson Self-Report Psychopathy Scale (LSRP). Participants were instructed to respond genuinely, exaggerate symptoms, or minimize symptom presentation on the MMPI-2 RF. The validity scales of the MMPI-2 RF validity scales, specifically F-r, Fp-r, L-r, and K-r, were analyzed. The results of Study 1 indicated that level of psychopathy did not help participants to successfully overreport symptoms on the MMPI-2 RF without being detected. However, higher levels of psychopathy seemed to make it easier for participants in the underreporting group to minimize their symptoms without being detected. These findings suggest that although psychopathy may be related to deception abilities, it is more strongly associated to underreporting than it is overreporting.

Study 2 completed by Marion et al. (2013) used archival data from a sample of 122 male inmates within the federal prison system who were referred for forensic evaluations for competency, criminal responsibility, or to aid in sentencing. Each of the 122 inmates had been administered the SIRS, PCL-R, and the MMPI-2 RF. The most common psychiatric diagnosis among this sample was Antisocial Personality Disorder. Participants were classified into either genuine or overreporting categories based upon their scores from the SIRS. Results indicated that individuals in the overreporting group had significantly higher PCL-R scores than participants in the genuine responders group. Marion and colleagues (2013) also examined whether psychopathy served as a

moderating variable regarding the participant's ability to produce elevations on MMPI-2 RF scales without being detected as feigning. Similar to the results from Study 1, analyses indicated that psychopathy was *not* a moderating variable in determining whether a participant was able to overreport on the MMPI-2 RF without being detected. The results of both studies by Marion et al., (2013) article suggests psychopathy does not indicate that a patient is more likely to malingering.

As discussed above, research has indicated several strategies and factors that may allow for an individual to malingering successfully. In some cases, it is unclear how some individuals are able to go undetected, and in more complex cases, individuals may be able to convince a wide panel of mental health professionals that their symptoms presentation is genuine. A case example of malingering is presented below.

CHAPTER 7

CASE EXAMPLE OF MALINGERING

Eddy¹ is a 35-year old single, Caucasian male who was recently arrested and charged with Aggravated Assault. Eddy has a history of being arrested for Possession of a Controlled Dangerous Substance, Robbery, and Driving While Intoxicated. He is being held in the local jail because he cannot afford his expensive bail. While in court for his Aggravated Assault charge, Eddy claims that he experiences auditory hallucinations that command him to hurt people. He states that this was the reason why he allegedly struck another man with the intent to do great bodily harm. A forensic psychologist is requested to perform a psychological assessment evaluation in order to determine whether Eddy meets criteria for a Thought Disorder, Personality Disorder, and/or if Eddy is malingering. At first, Eddy refused to cooperate with testing. However, following a meeting with his attorney, Eddy's attitude shifted and he agreed to cooperate.

During the clinical interview, Eddy claims he has “heard voices for years” and that he is “powerless against them.” He states that the voices that he hears tell him to harm “anyone who gets in his way,” and are not specifically centered around any particular individual. Eddy states that there is nothing he can do to make the voices go away and that “sometimes, they're so bad that they wake [him] up at night.” He describes himself as a “loner” and states he has a hard time making friends because “the voices are too distracting and they just want [him] to hurt people.” Eddy stated that his highest

¹ All identifying information has been changed so to keep this patient's identity confidential.

completed level of education was graduating high school. Eddy is not currently taking any psychotropic medications, nor has he ever been prescribed any in the past.

Following the clinical interview, Eddy is administered Mini Mental Status Exam (MMSE) which is a brief cognitive status screener as well as the MMPI-2 and the SIRS. During the administration of the MMSE, Eddy is asked to count backwards by 7s beginning from 100. Eddy goes into a trance-like state and begins to rattle off numbers that are clearly incorrect. His results from the MMPI-2 show elevations on the F, Fb and Fp T score scales, but not high enough to automatically invalidate the results (F T score=72, Fb=76, Fp= 69). He endorses several items suggestive of a type of severe Psychotic Disorder. Eddy's MMPI-2 results are similar to those endorsed by an individual with chronic and severe Paranoid Schizophrenia.

Eddy is given a break following the administration of the MMPI-2. Unbeknownst to Eddy, the evaluating psychologist sees Eddy in the common area laughing and conversing with other inmates. He appears comfortable and at ease. The psychologist over hears Eddy saying to his peers "I may be going to the loony bin with all them whack-jobs but at least its better than prison." When Eddy returns from his break, he is administered the SIRS. The results of Eddy's responses place him into the higher end of the category indicative of *Probable* feigning.

Following the evaluation, the psychologist determines that Eddy is feigning mental illness. It is possible that during his meeting with his attorney, Eddy was coached on the possibility of feigning mental illness in order to avoid prison. The nature of auditory hallucinations is rarely so intense that people feel completely helpless against them. Further, they are typically specific in nature, and rarely wake a person from their

sleep (Resnick, 1997). The MMPI-2 profile that Eddy produced would likely be seen in a patient with chronic Schizophrenia. Although Eddy reported experiencing auditory hallucinations for several years, he has no history of psychiatric hospitalizations or mental health treatment of any kind. His scores on the SIRS suggest that he is likely feigning the degree and severity of psychiatric symptoms present. Lastly, the psychologist's behavioral observations directly contradicted Eddy's description of his mental illness and suggest that Eddy is higher functioning than he claims. Specifically, Eddy appeared sociable with others and stated his intent to avoid prison which qualifies as external gain. Although there is strong evidence to suggest that Eddy is malingering, the psychologist that evaluated him may still be hesitant to indicate that Eddy was malingering on a formal evaluation. This case example highlights the complexity of malingering assessment, and speaks to the flaws of the current description of malingering within the DSM-5.

CHAPTER 8

CLINICAL IMPLICATIONS

This review is expected to make an important contribution to the area of forensic assessment. Specifically, it addresses several factors that may influence malingering that have not yet been adequately addressed in existing literature. This review also highlights that the further research is needed on the topic of factors that contribute to a patient's ability to mangle without being detected. Given the potential clinical implications, it is imperative that psychologists are adequately trained in the assessment of psychiatric malingering and are aware of all possible factors that may contribute to a patient's ability to mangle successfully. Clinicians must also be aware of factors within their patient's clinical presentation that may impact their scores on objective measures including possible intellectual disabilities, trauma histories, and comorbid personality disorders. Other relevant clinical issues of importance include addressing feigning patients when they are detected, as well as the implications of assessment measures' psychometric properties.

There is a lack of consensus within the field regarding the best approach to confront malingering with a patient. Some clinicians argue that a malingering patient should not be directly confronted at all whereas others such as Resnick & Knoll (2005) suggest that a clinician should ask the patient to clarify/explain discrepant responses. With regards to addressing such issues with the patient, studies have found that confronting the patient by stating that their responses/presentation does not appear honest can have an impact on their response styles on future assessment measures. For instance, Frederick & Towers (2002) found that patients became more honest in future assessments

after being confronted about their malingering behaviors. However, other research has shown confronting malingering patients may lead to defensive reactions, and the patient may deny any malingering outright (McDermott et al., 2008). Given the varied findings, it is unclear whether the confrontation approach is beneficial or not for future assessments or the therapeutic relationship.

Confronting malingering patients can also impact the therapeutic alliance between a clinician and their patient. However, the impact of the confrontation on the therapeutic relationship will vary depending on the case. For example, some confronted patients may react defensively or with frustration (McDermott et al., 2008). In such cases, a clinician should be sure to take necessary precautions to maintain their safety. However, other studies suggest that confronting a malingering patient may improve the nature of the therapeutic relationship because the patient may have more respect for the clinician and feel that he/she is apt enough to detect their deceptive behavior (Walters, 2006).

In addition to addressing feigning patients, another issue that warrants attention is the implications of assessment measure psychometric properties. The sensitivity and specificity rates of malingering measures determine the ability of that measure to accurately identify true feigners and genuine responders. Both undetected malingering and false-positive diagnoses of malingering may have severe consequences for the field of forensic psychology, especially for the clients/patients involved in the evaluations. Within psychological research, Type I errors (i.e., false positives) are considered to be more harmful than Type II errors (false negatives). As such, while it is ideal for assessment measures to have high rates of both sensitivity and specificity, higher rates of specificity will reduce the likelihood of a Type I error occurring. Generally, specificity

rate of .90 for assessment measures are considered excellent; however, this rate, indicates that the field is willing to be inaccurate in roughly 10% of malingering evaluations.

Based upon these distinctions, it is considered more harmful to accuse a patient that is responding genuinely of feigning than it is to miss a patient who may be feigning their presentation. This is in line with Rogers' (1997) noting that "for every malingerer correctly identified, nearly four times as many *bona fide* patients are miscategorized as malingerers." Therefore, it is the obligation of competent and ethical evaluators to use assessment measures with strong psychometric properties in their malingering evaluations so to minimize the risk of Type I and Type II errors.

There has also been research that discusses the general ethical implications associated with malingering evaluations. For example, it may be considered unethical to assess a patient for malingering without informing the patient that the validity of their responses will be assessed by validity indices (Seward & Connor, 2008). Other clinicians support the idea that encouraging a patient to provide honest responses and their best effort is sufficient, as other information may jeopardize the validity of the evaluation (Seward & Connor, 2008). As such, there is a lack of consensus regarding the most ethically ideal manner to handle informed consent for malingering evaluations.

Furthermore, as previously described, there is significant stigma associated with malingering. Once a patient is identified as a malingerer, it may be difficult for that patient to rid themselves of that label. A crucial clinical implication that has not been thoroughly explored is patient-clinician relationships when there is a question of malingering. To date, very limited research has studied the impact that transference and countertransference regarding malingering has on the relationship between the patient

and the clinician. Although the treating clinician is often *not* the person who evaluates a patient for malingering, the identification of malingering may impact the relationship between the patient and his/her clinical treatment team. The team may lose trust in the patient and become frustrated with the patient's disingenuous presentation. As discussed above in earlier sections, malingering is more appropriately conceptualized on a continuum, rather than as a dichotomous variable. Patients who are malingering one day may completely change their behavior presentation the following day. However, once a clinician has identified that a patient is malingering, that clinician may be less inclined to offer services to that patient given their previously deceptive presentation. It is possible that if potential malingering is addressed in a manner that is less blaming and punitive and more understanding, the rates of malingering would decrease.

CHAPTER 9

CONCLUSION

In conclusion, it is clear from this summary of research that malingering continues to be a significant clinical issue that is common within a forensic mental health population. The primary aim of this paper is to provide forensic and clinical psychologists with a comprehensive review of research on how to best approach the assessment of psychiatric malingering. More specifically, this review provides mental health professionals with a summary of psychiatric malingering research based on several assessment measures while considering the impact of variables that are commonly encountered in a forensic psychiatric setting including culture, intellectual disabilities, literacy abilities, and co-morbid personality disorder diagnoses. While several psychometric measures have been developed to identify a patient who is feigning and/or exaggerating his/her psychopathology, a definitive method of malingering detection has not been developed.

In reviewing the available research on malingering assessment, suggestions for best practice guidelines can be inferred from this literature review. This review provides support for the current standard for malingering assessment, which includes a thorough clinical interview, behavioral observations, and objective assessment measures. With regards to the most successful objective assessment measure, the SIRS-2 has yielded the most promising data to confirm its status as the gold standard within the field of psychiatric malingering assessment. The SIRS-2 and the current standards for malingering assessment have been well supported by research and are widely accepted within the field.

Despite a current standard for malingering assessment, there remains a lack of best practice guidelines for how/when a malingering assessment should be initiated. For example, it remains largely unclear as to when malingering should be suspected in forensic and correctional settings. Resnick (1997) indicated that behavioral observations play a significant role during malingering evaluations. Based on this logic, it is beneficial for all hospital unit/correctional facility staff to closely observe new forensic patients and correctional inmates to watch for inconsistencies or potentially exaggerated presentations. A patient/inmate requesting addictive medications has also been suggested as a red flag for malingering (Resnick, 1997). Many hospital unit floor staff have the experience of observing patients on a 24 hour basis, where an evaluator may only be on the unit for a comparably short duration of time. As such, consulting with members of a multidisciplinary team may be considered a best practice guideline in determining whether to initiate a malingering evaluation.

With regards to whether it should be considered best practice to perform initial malingering screens in certain clinical settings, there is strong evidence indicating that all patients undergoing competency evaluations should be screened for malingering, (Vitacco, Rogers, & Gabel, 2009). This is supported by the rates of malingering within forensic and correctional settings and the legal implications of malingered incompetency. Specifically, a screener, such as the M-FAST, should be utilized to identify feigning among forensic patients and correctional inmates reporting mental health issues, especially those without a documented history of mental illness. This type of approach may decrease false negatives (Type II errors), but also has the potential to increase false positives (Type I errors). As noted above, Type I errors are considered more egregious

within the field; therefore an approach of screening every forensic patient and correctional inmate in every context is potentially problematic. For marginal cases in which an evaluator is unsure or there is a lack of inferred external gain, clinicians are strongly cautioned against labeling a patient/inmate as malingering given the stigma and implications surrounding that label. These cases are best to be deferred until more information is gathered and a definitive decision can be made. Clinicians and evaluators are recommended to utilize the best practice standards suggested above in order to competently assess for malingering within adult forensic populations.

Despite a large amount of available research on psychiatric malingering, this review has highlighted deficits within certain topics and suggests directions for further research. For example, further research regarding the impact of cultural differences on malingering evaluations/feigned presentations is necessary. This was briefly addressed in the discussion of research by Miller (2004) and Guy & Miller (2004) within this review. However, these studies were limited to comparing Caucasian and African American male participants. More research is required to understand how feigning differs across demographic characteristics including age, gender, and ethnicity differences. Another area for future research is the relationship between the legal system and feigning. For example, this review highlighted that coaching increases an individual's ability to feign successfully (Storm & Graham, 2000; Veltri & Williams, 2012). It is possible that knowledge of the legal system as well as familiarity with the structures of forensic and correctional settings may also impact a person's ability to feign without being detected. As research on this topic continues to evolve, it will be imperative for clinicians to

remain informed of differing issues to consider in the assessment of suspected malingering.

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