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Evaluation of the ECST-R ATP Scales: Detecting Coached Diagnostic-Specific Feigning and Coached Feigning of Incompetency to Stand Trial, With Comparison to the M-FAST

Alynda Randolph

EVALUATION OF THE ECST-R ATP SCALES: DETECTING COACHED DIAGNOSTIC-SPECIFIC FEIGNING AND COACHED FEIGNING OF INCOMPETENCY TO STAND TRIAL, WITH COMPARISON TO THE M-FAST

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Title: Evaluation of the ECST-R ATP Scales: Detecting Coached Diagnostic-Specific Feigning and Coached Feigning of Incompetency to Stand Trial, With Comparison to the M-FAST

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The current study used a simulated design to evaluate the performance of the ECST-R ATP Scales with undergraduate participants who were coached using information readily found on the internet to feign incompetency, schizophrenia or both. This study was largely exploratory in nature, but sought to determine if the ATP Scales would be effective when identifying participants with different feigning motivations. The present study also compared the performance of the ATP Scales to the M-FAST in terms of the ability to screen for potential feigning in the aforementioned groups of participants to investigate whether the ATP Scales are more effective in identifying feigning among CST examinees, particularly those feigning incompetency, than a screening measure constructed to identify only feigned psychopathology. The results of the current study suggest that there may be some increased utility of the ATP Scales when identifying feigning of incompetency to stand trial; however, the demonstrated specificity was particularly low leading to concerns regarding clinical utility. It is suspected, however, that the results of the current study relevant to the ATP Scales may have been impacted by the utilization of undergraduate participants and their likely less extensive exposure to the courtroom as compared to forensic samples such as genuine CST examinees.

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CHAPTER 1

INTRODUCTION

Competency to stand trial (CST) is defined as "the legally determined capacity of a criminal defendant to proceed with criminal adjudication" (Mossman et al., 2007, p. S4). The terms *fitness to proceed*, *adjudicative competence* and *competence to proceed to adjudication* may be used synonymously with CST, and some even argue that the latter two terms are more appropriate (Kruh & Grisso, 2009). Indeed, CST is not limited to the trial itself, but applies to all stages of the adjudication process, including pre and post-trial. Further, many defendants never formally stand trial because they negotiate a plea deal (Zapf & Roesch, 2009); however, they may still require an evaluation to determine whether or not they are competent to stand trial (i.e. competent to participate in all relevant judicial proceedings, including negotiating a plea deal).

The consideration of CST dates back to at least the 17th century (Winick, 1995), and today, evaluations of CST have been described as "the most significant criminal issue in forensic mental health" (Melton, Petrila, Poythress, & Slobogin, 2007, p. 141). In fact, CST evaluations occur in an as many as 8% of felony cases (Hoge, Bonnie, Poythress, & Monahan, 1992) and an estimated 60,000 occur annually in the United States (Poythress, Monahan, Bonnie, Otto & Hoge, 2002). Further, some suggest that this latter estimate (60,000) is conservative and the actual number could be twice that amount (Rogers & Johansson-Love, 2009).

Although the determination of an individual's CST is ultimately a legal decision to be made by The Court (Mossman et al., 2007), the expert opinion of clinicians is heavily relied on and rarely disagreed with (Zapf, Hubbard, Cooper, Wheeles & Ronan, 2004). Indeed, Zapf et al. noted that prior estimates of concordance rates between mental health professionals' expert opinions and the decisions of the courts regarding CST were typically about 90%. However, the

authors found a concordance rate of 99.7% in their study conducted in Alabama. The authors indicated that this high rate of concordance and reliance on mental health experts' opinions tends to disregard the typical caution that experts refrain from giving an opinion on the ultimate issue (i.e. competent or incompetent to stand trial) and renders the legal decision of CST a largely clinical decision. As such, it is particularly important that clinicians conduct thorough and accurate CST evaluations. Further, a defendant found incompetent to stand trial may be subject to involuntary treatment and confinement in a psychiatric hospital or other setting for competency restoration, whereas a defendant found competent to stand trial will proceed in the adjudication process, which may include incarceration (Melton et al., 2007). Thus, an inaccurate determination of incompetence to stand trial can result in unnecessary treatment and/or hospitalization, an unfounded delay in legal proceedings, and unnecessary costs. Alternately, an inaccurate determination of competence to proceed may constitute a violation of the defendant's constitutional rights to due process, a violation of sixth amendment rights to effective counsel, to present evidence and to confront accusers, and could ultimately lead to a mistrial (Melton et al, 2007). Clearly, this compounds the importance of thorough CST evaluations.

To exacerbate the already high stakes involved in CST evaluations, attention must be paid to the possibility of malingering, as is the case for all forensic evaluations (Drogin, Dattilio, Sadoff & Gutheil, 2011). Pre-trial defendants may be motivated to malinger for reasons such as avoiding trial or incarceration (Mary & Carr, 2015). Indeed, estimates of malingering in competency evaluations range from 10% (Cornell & Hawk, 1989) to as many as 29% of pre-trial defendants (Boccaccini, Murrie, & Duncan, 2006). Fortunately for evaluators, there are variety of assessment tools available to assist in evaluating CST and malingering that are typically discrete assessment tools rather than combined with competency measures (Drogin et al., 2011),

requiring examiners to administer at least two separate measures. This can be potentially problematic, as examiners must balance the need for a comprehensive evaluation with constraints of time, resources, and other practical considerations (Jackson, Rogers, & Sewell, 2005). The lack of a method for assessing feigning in most CST measures can be seen as reducing their stand-alone use, and unless a separate malingering measure is used along with a CST measure, can lead to more false positives (i.e. false determinations of incompetency to stand trial; Rogers, Jackson, Sewell & Harrison, 2004; Abrams, 2002).

To assist with balancing their practical constraints (e.g., time and cost) and professional responsibilities, examiners may opt to use a brief screening tool, such as the Miller Forensic Assessment of Symptoms Test (M-FAST; Miller, 2001), to screen for fabrication or over-exaggeration of psychiatric symptoms. Indeed, examiners may opt to only complete a full malingering evaluation when elevations occur on the screening measure. This can potentially save valuable time and other resources, while also sparing honest responders from unnecessary evaluation. A relatively new measure, the Evaluation of Competency to Stand Trial- Revised (ECST-R; Rogers, Tillbrook, & Sewell, 2004), has the potential to provide even further convenience and cost reduction through the use of one instrument to both assess CST and screen for feigning. Further, the measure is the first that is designed to specifically screen for feigned incompetency to stand trial (Rogers, Jackson, et al., 2004). The ECST-R includes the Atypical Presentation Scales (ATP Scales), designed to assess for feigned incompetency (hereinafter referred to as the ATP Scales), and includes three other scales designed to assess CST abilities (Rogers, Tillbrook, & Sewell, 2004). Other currently available malingering screening measures, such as the M-FAST, primarily assess for feigning of symptoms, rather than feigned incompetency (Rogers, Jackson, et al., 2004). Further, of the available competency measures,

only the Georgia Court Competency Test (GCCT; Johnson & Mullett, 1987) incorporates a screening scale, also called the Atypical Presentation Scale (ASP), although this scale also screens only for feigning of psychiatric symptoms. As will be described in greater detail later, the ATP Scale was developed from elaboration and refinement of the ASP (Rogers, Jackson, et al., 2004). This addition of screening for feigning of incompetency impairment is important because research shows that competency to stand trial examinees often rely on more than one strategy to feign impairment (e.g., feigning psychiatric symptoms, lack of legal knowledge, and/or memory impairment) and when already using one strategy to appear impaired, there is a significantly increased risk that examinees will engage in another strategy (Gottfried, Vitacco, & Steadham, 2017; Gottfried & Glassmire, 2015; Vitacco et al., 2009).

Guy, Kwartner, and Miller (2006) explained that the vast majority of malingering assessment tools have been evaluated in terms of their ability to detect feigning of specific disorders in addition to general symptoms. Psychosis may be more commonly feigned in the criminal forensic arena (Cornell & Hawk, 1989) and Melton et al. (2007) noted that the association between a determination of incompetency to stand trial and major mental illnesses, particularly major affective disorders and Schizophrenia, has been well established in research. Indeed, the authors detailed that clinical judgments of incompetency are closely linked with particular symptoms such as paranoia, hallucinations, delusions, thought disorder, and disorientation. Lastly, Vitacco, Rogers, Gabel, and Munizza (2007) identified that future research should evaluate the overlap of psychopathology and malingering, noting that the most effective ECST-R ATP Scales were those including psychotic content.

Finally, coaching can also be a relevant concern in forensic evaluations. Examinees can learn a considerable amount of information about how to present themselves through libraries and the

internet (Ruiz, Drake, Glass, Marcotte, & van Gorp, 2002; Melton et al., 2007), and a fair number of examinees have considerable discussion with their attorneys about the evaluation process prior to being evaluated (Lees-Haley, 1997; Melton et al., 2007). Additionally, those coached on how to effectively malinger could conceivably be the most difficult to detect by assessment measures and, as such, demonstration of a measure's ability to detect such persons could further validate its use and efficacy.

In sum, malingering, including the use of multiple malingering strategies (Gottfried, Vitacco, & Steadham, 2017; Gottfried & Glassmire, 2015; Vitacco et al., 2009), and coaching are relevant concerns in forensic evaluations such as CST evaluations. Additionally, psychosis may not only be more commonly feigned in the criminal forensic arena (Cornell & Hawk, 1989), but the association between a determination of incompetency to stand trial and schizophrenia, a psychotic disorder, has been well established (Melton et al., 2007). There are multiple measures available to both assist with evaluation of competency to stand trial and aid in the assessment of malingering; however, the ECST-R is a unique measure in that it allows for the evaluation of competency abilities in addition to screening for the presence of feigning psychiatric symptoms and incompetency to stand trial through the ATP Scales. The current study was exploratory in nature and sought to determine whether the ATP Scales' incorporation of both symptomatology and CST specific impairments in screening for feigned incompetency is more effective than screening for feigned incompetence to stand trial or feigning of mental illness alone. Further, the study sought to evaluate whether those *coached* on how to feign schizophrenia and/or incompetency to stand trial could be accurately identified by the ATP Scales as feigning. This was intended to potentially lend support to or contradict prior research suggesting the utility of the ATP Scales with coached participants (Springman & Vandenberg, 2009; Norton & Ryba,

2008), and further, expand upon this prior research. Indeed, unlike past research, the current study incorporated an experimental group of participants coached only to feign incompetency to stand trial, in addition to groups feigning mental illness alone and mental illness and incompetency combined. Coaching instructions were based on information readily found on the internet to increase ecological validity, but again expanding upon prior research, provided detailed information on how to feign incompetency, mental illness, or both, including diagnostic-specific information for the mental illness group (i.e., Schizophrenia) based on the DSM-5 (APA, 2013).

Lastly, the present study compared the performance of the ATP Scales and the M-FAST in terms of their ability to screen for feigning in the aforementioned groups of participants to investigate whether the ATP Scales are more effective in identifying potential feigners in CST examinations than a screening measure constructed to identify only feigned psychopathology. The study thus also allowed for exploration of the utility of the measures with individuals using different feigning tactics (i.e, feigning incompetency, mental illness, or both).

CHAPTER 2

LITERATURE REVIEW

Competency to Stand Trial

Historical Foundation

Competency to stand trial (CST) laws can be traced back to at least the 17th century (Winick, 1995) when, as is still the case today, defendants were required to state their plea during the outset of trial proceedings. Some believe that consideration of CST was in response to mute defendants who were incapable of stating their plea (Melton et al., 2007). In such circumstances, the court impaneled a jury to determine whether the prisoner was "dum *ex visitatione Die"* ("dumb by visitation of God") or "obstinately mute" (Blackstone, 1783). If the prisoner was deemed "dumb by the visitation of God," the trial proceeded as though the prisoner plead not guilty (Blackstone, 1783). However, if a prisoner was found to be obstinately mute, including if he cut out his own tongue, standing mute was considered to be "equivalent to conviction" (Blackstone, 1783). Such persons would have increasingly heavy weights placed upon them, originally until "he answered" (confessed), but this punishment was later modified to state until death (Blackstone, 1783).

In the early 19th century, Sir William Blackstone (1783) stated, "…deficiency in will which excuses from the guilt of crimes arises also from a defective or vitated (sic) understanding, *viz*. in an *idiot* or a *lunatic*. In criminal cases therefore idiots and lunatics are not chargable (sic) for their own acts if committed when under these incapacities." He went on to say that if before or after arraignment an individual "becomes mad…he ought not to be arraigned for it because he is not able to plead to it with the advice and caution that he ought" and "he shall not be tried for how can he make his defence (sic)?". Further, he noted that the same consideration should apply

if a person “loses his sense” before judgment or execution, under which circumstance the proceedings should be delayed. Essentially, from Blackstone’s comments, it can be inferred that the legal proceedings that were utilized for mute defendants were, by at least the early 19th Century, applied to defendants who were deemed to be intellectually disabled (“idiots”) or severely mentally ill (“lunatic”). Further, it is notable from Blackstone’s commentary that the mental status of defendants was given consideration throughout the adjudication process, including at the time of imposition of penalties, which is still an integral component of CST criteria today.

The Dusky Standard

Currently, in the United States, the consideration of CST is linked to both due process, granted by the Fourteenth Amendment, and an individual’s Sixth Amendment rights to effective counsel, to confront accusers, and to present evidence. Exercising such rights requires that an individual be not only physically, but also mentally, present. Additionally, some suggest that competency requirements also relate to a larger societal issue in which the adversarial nature of the legal proceedings in the United States also needs to be dignified (Melton, et al., 2007). Further, the Group for the Advancement of Psychiatry (1974) detailed four principles related to the creation of CST legal requirements: to guarantee a fair trial, safeguard the accuracy of criminal adjudication, preserve the dignity and integrity of the legal process, and be certain that the defendant knows why she/he is being punished (p. 889).

The CST standard currently used in federal court and most state jurisdictions in the U.S. is the *Dusky Standard* (Melton et al., 2007). In 1959, Milton R. Dusky, diagnosed with schizophrenia, was found competent to stand trial, in part because he was oriented to person, place and time at the time of the evaluation. He was subsequently convicted of Kidnapping and

Transporting a Minor Across State Lines (Milton R. Dusky, Appellant, v. United States of America, 1959). Mr. Dusky appealed his conviction on the grounds that the determination of his competency was based on insufficient evidence. Although his appeal originated in the Eighth Circuit Court of Missouri, the case was moved to the U.S. Supreme Court in order for The Court to provide a ruling regarding criteria for determination of CST, which was nonexistent at the time. In *Dusky v. The United States* (1960), the U.S. Supreme Court ultimately ruled that the "test must be whether he (the defendant) has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding -- and whether he has a rational as well as factual understanding of the proceedings against him" (p. 362, U.S. 403).

Rogers, Tillbrook, and Sewell (2004) detailed that one method of conceptualizing the *Dusky Standard* is as a three-prong model of discrete abilities. The authors identified the three prongs as: "a rational ability to consult" with counsel, a "factual understanding of the courtroom proceedings," and a "rational understanding of the courtroom proceedings" (p. 3). Melton et al. (2007) also detailed that the *Dusky Standard* includes a number of components. They noted that defendants must be able to understand the legal process and their own role in that process, as is applicable to their individual cases. Further, defendants must be able to participate in the legal proceedings, particularly in terms of consulting with counsel and otherwise preparing their defense. Melton et al. (2007) elaborated that the *Dusky Standard* pertains to the *present* ability and *capacity* of defendants, rather than their ability at the time of the alleged crime (which pertains to criminal responsibility) or their current *willingness* to understand the proceedings and consult with counsel. Further, Melton et al. (2007) explained that under the *Dusky Standard*, defendants have to be able to consult with their attorneys with a "reasonable degree of rational understanding" (p. 362, U.S. 403). It should be noted that this wording leaves flexibility as to

what is considered "*reasonable"* in any given case. Defendants, therefore, are not required to have a *comprehensive* understanding during consultation with their attorneys, only "reasonable," and what is considered a "reasonable" degree of understanding may vary by context. Indeed, one would expect that a higher degree of understanding would be necessary in a more complicated case or in a case in which the potential consequences are more severe (e.g., lengthy incarceration, capital punishment) than in a case such as a misdemeanor.

Lastly, Melton et al. (2007) emphasized that because the *Dusky Standard* requires both "rational" and "factual" understanding, this necessitates consideration of the defendant's cognitive functioning. Melton et al. (2007) noted that the presence of a mental illness or a particular intellectual quotient (IQ) score is not sufficient in itself to render a determination of incompetence to stand trial. Rather, mental illness and intellectual impairment must be considered in terms of their impact on relevant CST abilities (such as rational and/or factual understanding). This latter point is often emphasized in CST literature, including in the *AAPL Practice Guideline for the Forensic Psychiatric Evaluation of Competence to Stand Trial* (Mossman et al., 2007; Glancy, et al., 2015b). Further, some states have elaborated CST criteria to specifically require that a "mental disease or defect" (p.17) cause the identified CST impairment(s) (Kruh & Grisso, 2009).

As previously explained, the language in the *Dusky Standard* leaves room for interpretation and reliance on context. The requirements entailed in the standard are rather sparse, such that a number of states have incorporated additional requirements to establish CST, including the aforementioned provision that incompetency must be related to "mental disease or defect" (Kruh & Grisso, 2009). In 1993, the U.S. Supreme Court formally declared that states are permitted to adopt criteria more elaborate than that entailed in the *Dusky Standard* (*Godinez v.*

Moran, 1993) and at least five states have added such additional criteria (Alaska, Florida, Illinois, New Jersey and Utah; Zapf & Roesch, 2009). For example, Florida adopted six additional CST factors that, at minimum, must be assessed during competency to stand trial evaluations. These factors include the ability to appreciate charges/allegations, appreciate the range and nature of possible penalties (if applicable), understand the adversarial nature of the legal process, disclose to defense counsel facts pertinent to the proceedings at issue, manifest appropriate behavior in the courtroom, and testify relevantly (FL. R. Crim. Pro. § 2.311 (a)).

Post-Dusky CST Rulings

Following *Dusky v. The United States* (1960), a number of cases occurred that also addressed determination of CST. A few of the relevant landmark cases are reviewed below; however, for a more thorough review of legal precedent for CST, readers may refer to resources such as Melton et al. (2007), Mossman et al., (2007) Kruh and Grisso (2009), and Zapf and Roesch (2009).

Soon after *Dusky*, the U.S. Supreme Court in *Jenkins v. United States* (1962) ruled on the issue of expert testimony provided by psychologists. Prior to *Jenkins*, medical doctors (e.g., psychiatrists) were viewed as being the primary experts on mental health. The *Jenkins* case arose after a trial judge ordered a jury to disregard the expert testimony of three psychologists because they were not considered qualified to diagnose mental illness (Zapf & Roesch, 2009). Specifically, The Court ruled in *Jenkins* that psychologists can serve as experts on a number of mental health-related issues, dependent on the psychologist's qualifications. Although this particular case was related to the use of an insanity defense, the ruling pertains to the expert status of psychologists in general and still applies today. In virtually all states today,

psychologists can provide expert testimony regarding CST and other issues such as criminal responsibility (Farkas, DeLeon & Newman, 1997).

Another landmark case is *Pate v. Robinson* (1966), in which The Court ruled that a hearing regarding competence to stand trial should occur whenever there is a "*bona fide doubt*" (p. 386) regarding the defendant's competency. As Mossman et al. (2007) noted, "bona fide doubt" is a rather low threshold to require a competency evaluation. Courts rarely refuse a request for a competency evaluation, in part due to fear that any subsequent conviction will be overturned on the grounds that the defendant's rights to due process were violated (Owens, Rosner & Harmon, 1987). Further, Melton et al., (2007) stated, "Preventing trial of an incompetent defendant is sufficiently important to society, regardless of the individual's desires, that the system tends to resolve marginal cases by calling for a competency inquiry" (p. 133). As may be expected, this low threshold for CST evaluation leads to a number of competent defendants undergoing CST evaluations (Mossman et al., 2007). In fact, research suggests that the majority of defendants evaluated for CST are ultimately found competent. For example, in a meta-analytic review of CST research, Zapf (2011) found that only 27.5% of defendants evaluated were found incompetent to stand trial. Melton et al. (2007) also provided an overview of research indicating that approximately 30% of defendants evaluated for CST are ultimately found incompetent. This suggests that approximately 70% of defendants evaluated for CST are actually competent, which further emphasizes the importance of an efficient and accurate CST evaluation.

Also addressed in *Pate v. Robinson* (1966), The Court stated that the competency issue may be raised by any officer of the court. In most jurisdictions, the judge, defense attorney, prosecutor or defendant (*sue sponte*) can raise the issue (Eizenstat, 1969; Melton et al., 2007);

however, the defense attorney most commonly raises the issue (i.e., whether or not the defendant is competent and in need of evaluation) in CST evaluations (Winick, 1995).

In 1975, The Court stated in *Drope v. Missouri* that a defendant must be able to "assist in preparing his defense" (420 U.S. 162, 1975, p. 171). This ruling clearly elaborates on the *Dusky Standard* in that defendants need not only to be able to consult with their attorneys, but also have the capacity to actually assist in preparing their own defense. Additionally, The Court indicated that expert opinion regarding a defendant's CST, a defendant's demeanor in court, and evidence of a defendant's irrational behavior are all important considerations. Further, any one of these factors may, in some circumstances, be sufficient to prompt further evaluation of the defendant's CST (p. 180). The Court indicated that, throughout the adjudication process, the court needs to be aware of any notable changes that occur in the defendant that could suggest incompetence (Kruh & Grisso, 2009). This ruling essentially elaborated on *Pate* in that it made clear that *bona fide doubt* may arise at any point during the legal proceedings. Again, The Court emphasized the importance of being mindful of the defendant's CST status throughout the adjudication process.

Another landmark case regarding CST is *Godinez v. Moran* (1993). As previously mentioned, The Court explicitly ruled in this case that states may adopt additional criteria to elaborate on the *Dusky Standard*. The Court also stated that the standard for CST is the same for pleading guilty or waiving right to counsel. This ruling received some criticism, as many interpreted it as applying to *pro se* competence (i.e., ability to represent oneself in court) and believed that the competency requirements to proceed *pro se* should be higher than that of CST (Zapf & Roesch, 2009). Although there is some debate about the ultimate impact of this ruling, Grisso (2005) stated that it is now generally accepted that CST includes a "defendant's capacities to participate in all aspects of the adjudicative process and to participate in whatever decisions

might be required during that process" (p. 10; Kruh & Grisso, 2009), of which evaluators need to be mindful when completing CST evaluations. Further, this ruling affirmed that trying an incompetent defendant is a violation of due process rights granted by the Fourteenth Amendment.

In *Cooper v. Oklahoma* (1996), The Court ruled that incompetency needs to be proven based on a *preponderance* of evidence. The Court denied that the higher standard of *clear and convincing* evidence needs to be met. As formerly detailed, CST is ultimately a legal issue and so The Courts, not clinicians, must decide whether or not the burden of proof (preponderance of evidence) has been met. However, as Zapf et al., (2004) described, courts rarely disagree with the clinician's opinions on the ultimate issue, which may render the decision a largely clinical one. A particular problem with this is that the clinical decision may not be based on the *preponderance* of evidence as is the legal standard; however, clinicians should strive to provide a thorough and impartial evaluation of a defendant's CST abilities in order to assist The Court in deciding whether or not a *preponderance* of evidence demonstrates incompetency.

Lastly, in 2008, the U.S. Supreme Court returned to the issue of competency to proceed *pro se* in *Indiana v. Edwards*. The Court stated that the ruling in *Godinez* pertained only to the defendant's ability to plead Guilty, not his ability to represent himself in trial (*pro se* competence). The Court indicated that competency to proceed *pro se* requires a higher level of competency than competency to stand trial; however, The Court did not explain what the requirements for *pro se* competency should be. Lastly, The Court stated in *Indiana v. Edwards* that States have the right to require defendants to be legally represented if they are competent to stand trial, but incompetent to proceed *pro se*. Subsequently, this may lead to an additional or separate referral question that evaluators must consider (*pro se* competency).

CST Evaluations: The Legal Process

Grisso (2003) outlined five basic steps in the legal process for CST evaluations. The first step is a request for an evaluation, which is at times called "raising the question" (Grisso, 2003, p. 74). As discussed, the threshold for requesting a competency evaluation is rather low and occurs whenever there is a *"bona fide doubt"* (*Pate v. Robinson*, p. 386) regarding a defendant's competency. This doubt may arise at any point during the adjudication process (Mossman et al., 2007), and although defense attorneys typically request CST evaluations (Winick, 1995), prosecutors, judges, or defendants themselves (*sua sponte*) can, in most jurisdictions, make such a request (Eizenstat, 1969; Melton et al., 2007). Clinicians need to be aware when receiving referrals for CST evaluations that some referrals are made for inappropriate reasons such as to delay trial (Zapf & Roesch, 2009). Indeed, this can make the assessment of malingering particularly important.

The second step of the legal process is the actual competence evaluation (explained below), which is followed by the third step, a judicial determination of competency. If the defendant is adjudicated competent to stand trial, the defendant may proceed to trial or negotiate a plea deal. However, if a defendant is found incompetent, provision of treatment will occur with subsequent hearings on competence (Grisso, 2003).

CST Evaluations: The Evaluation Process

Although a set standard for the CST evaluation process does not exist, there are common components that should be applicable to all CST evaluations. These components include preparation for the evaluation (such as thoroughly reviewing and clarifying the referral), notifying the client of the evaluation, obtaining assent or consent from the client, assessing the current mental status of the client, clinical interview, administration of assessments/

psychological tests as appropriate (may include an assessment of intellectual abilities and/or a malingering measure), administration of a CST measure as appropriate, collection of collateral and third party information, and interview of third parties if necessary (Drogin et al., 2011; Melton et al., 2007). Clearly, administration of assessment measures, such as malingering and CST assessments, is only one part of the evaluation process. Administration of such measures is intended to assist with informing determinations of competency, rather than being the basis for such determinations. Zapf and Roesch (2009) also emphasized that assessments are only one category from which data is accrued, as data is also collected from the clinical interview with the defendant, as well as information from third-party or collateral sources. Further, it is unethical to base clinical decisions purely on the outcome of assessment data (APA, 2010). Indeed, CST and malingering measures are not intended to be diagnostic in nature, but are intended to aid in the evaluation of CST abilities and should be interpreted in combination with all other relevant information such as the clinical interview (Mossman et al., 2007).

It should be noted that not all evaluators choose to use a formal assessment measure to evaluate CST and/or malingering and instead opt for a more idiosyncratic approach, based heavily on interview (Melton et al., 2007). However, Grisso (2003) detailed several benefits of using formal assessment measures to assess CST, including that such measures provide the examiner with structure, may improve communication in legal settings (i.e., the examiner can detail CST-relevant test data to The Court in order to tie the legal construct of competence with the client's abilities), and "facilitate empirical research on the associations between relevant functional abilities" and "the constructs of psychology and psychiatry" (p. 46). Some or all of these same benefits can likely be generalized to the use of a malingering measure. Further, in a study that compared the accuracy of clinical judgment of psychiatrists and psychologists to the

accuracy of malingering screens in identifying potential malingerers, Miller (2005) found that psychiatrists missed 50% of malingerers, psychologists missed 29%, while the Miller Forensic Assessment of Symptoms Test (M-FAST) missed only 7%. Malingering screens may then be particularly useful to decrease the likelihood that potential malingerers in need of further evaluation are missed in the evaluation process.

Should an evaluator choose to use a formal measure to assess malingering or CST, there are a variety of instruments from which to choose. Many CST measures assess functional abilities related to the three prongs of the *Dusky Standard* (Grisso, 2003), including the ECST-R (Rogers Tillbrook & Sewell., 2004) and the well-validated MacArthur Competence Assessment Tool-Criminal Adjudication (MacCAT-CA; Hoge, Bonnie, Poythress & Monahan, 1999). For example, the ECST-R includes three scales to assess CST abilities, one for each of the major components of the *Dusky Standard*, including Factual Understanding of the Courtroom Proceedings, Rational Understanding of the Courtroom Proceedings, and Consult with Counsel (Rogers, Tillbrooke & Sewell, 2004). There are also assessment measures designed for specific contexts as such as the Competence Assessment for Standing Trial for Defendants with Mental Retardation (CAST*MR; Everington & Luckasson, 1992) designed to assess CST in defendants with intellectual disabilities.

Regarding malingering measures, the feigning screen of the ECST-R is the first measure to specifically assess for malingering of incompetency to stand trial (Rogers, Jackson, et al., 2004). However, other options to assess for general feigning of symptoms in forensic contexts include screening tools, such as the M-FAST, and more comprehensive measures, such as the "gold standard" (Boccaccini, et al., 2006) malingering measure, the Structured Interview of Reported Symptoms (SIRS; Rogers, Bagby & Dickens, 1992). Some examiners also use the

Minnesota Multiphasic Personality Inventory – 2 (MMPI-2; Butcher, et al., 2001), which includes a number of validity indicators capable of detecting dishonest responding, including defensiveness, efforts to present oneself in an unrealistically favorable light and over-reporting of symptoms (Springman & Vandenberg, 2009). Additionally, there are other symptom or context specific malingering tests such as the Test of Memory Malingering (TOMM; Tombaugh, 1996), which assesses for feigned memory impairment.

Malingering

The *Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition* (DSM-5; APA, 2013) describes malingering as, "the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives" (p. 726). Considering the context of forensic assessments and what may be at stake, malingering should always be considered as a possibility (Heilburn, 2001). Indeed, as noted, pre-trial defendants may be motivated to malinger for reasons such as avoiding trial or incarceration (Carr & Mary, 2015), and as many as 29% may attempt to do so (Boccaccini et al., 2006). Given the potentially high prevalence of malingering in forensic examinations, examiners' threshold for suspecting malingering should be low; however, conclusions about malingering should be made only after careful consideration (Melton et al, 2007). There are potentially serious ramifications if a defendant is determined to be malingering. In fact, deliberate feigning of mental illness or symptoms can be grounds for lengthier prison terms (Mossman et al., 2007). Bearing this in mind, examiners should carefully gather and consider all relevant information during the evaluation process to inform an opinion about malingering.

In forensic settings, examiners may observe a number of different response styles from examinees, or in other words, ways in which examinees may present themselves. Rogers (2003)

identified five different response styles including “honest/candid,” “exaggerated/fabricated,” “denying/minimizing,” “irrelevant,” and “hybrid,” the latter of which is a combination of two or more of the aforementioned response styles (Melton et al., 2007). The majority of assessment measures screen for symptoms that fall in the “exaggerated/fabricated” category; however, examiners should be mindful that the response style of examinees can vary. Indeed, clients may minimize certain details (e.g., their memory of an alleged crime) while exaggerating others (e.g., current symptoms; Melton et al., 2007). This is mentioned as a reminder that assessment instruments cannot be used in isolation and are not intended to be diagnostic, but rather are to be considered in context with other information such as the clinical interview (Mossman et al., 2007). This applies to the ECST-R ATP Scales and other such assessments of feigning that are not designed to “diagnose” malingering, but rather should be used as one source of data to inform an expert opinion about malingering.

As mentioned, there are a variety of assessment tools that clinicians may use to assist in the assessment of malingering and most are designed to detect fabricated or over-exaggerated symptoms. These tools do not, however, address the motives for fabrication or over-exaggeration of symptoms. Because malingering entails not only the presence of false or grossly exaggerated symptoms, but also the presence of motivation due to external incentives, and as malingering measures do not address this motivation component, some suggest that *feigning* may be a more appropriate term to describe the response style detected by such assessment measures (Rogers, 2008). Feigning, as opposed to malingering, is defined as “the deliberate fabrication or gross exaggeration of psychological or physical symptoms without any assumptions about its goals” (Rogers, 2008, p. 6). Indeed, the terms are similar except feigning does not entail assumptions about motivations for the behavior. Despite the contrast delineated between these terms, they are

often used synonymously in the literature. Indeed, Melton et al. (2007) noted that a fabrication or exaggeration of symptoms is a response style often referred to as malingering (p. 57). For the purpose of this review, the terms malingering and feigning are used interchangeably.

It should be noted that motivation for feigning is not typically directly assessed in CST evaluations, as it can be inferred that feigning clients are motivated by a desire to "avoid pain" (Glancy et al., 2015, p. S42). The AAPL Practice Guideline for the Forensic Assessment (Glancy et al., 2015) categorizes malingering in forensic assessments into the two general categories of "avoiding difficult real-life situations or punishment (avoiding pain) and obtaining compensation or medications (seeking pleasure)" (p. S42). The authors provided the example that clients may avoid punishment through feigning incompetence. Further, Melton et al. (2007) noted that malingering may be motivated by an attempt to avoid sanctions.

Despite the variety of tools available to assist in the assessment of malingering, the ECST-R ATP Scale is the first to specifically assess for feigning of incompetency to stand trial (Rogers, Jackson, et al. 2004). Although this measure will be described in more detail later, it should be noted that feigned incompetency requires more than just feigning of symptoms. Indeed, the presence of a mental illness alone does not evidence incompetence to stand trial, rather, the impact that a mental illness or a mental defect has on specific competency abilities must be considered to establish incompetence (Melton et al. 2007; Mossman et al., 2007). Further, some states have elaborated CST criteria to specifically require that a "mental disease or defect" (p.17) cause any identified CST impairment(s) (Kruh & Grisso, 2009). Because the *Dusky Standard* is used federally and has been adopted by most states (Melton et al., 2007), examinees attempting to feign incompetence must feign a deficit in abilities related to one or more of the three prongs of the *Dusky Standard* (i.e., sufficient ability to consult with attorney

with a reasonable degree of rational understanding and a rational as well as factual understanding of the proceedings against him). Further, depending on the state's CST requirements, examinees may also have to feign in such a way to attribute their feigned CST deficit(s) to a feigned mental illness or other mental defect. Clearly, assessments that are designed to identify only feigning of symptoms, although they may be useful in CST evaluations, address only one component of feigned incompetence, unlike the ECST-R ATP Scales.

ECST-R

Overview of the ECST-R

The ECST-R (Rogers, Tillbrook, & Sewell, 2004) is a semi-structured interview designed to assess psycholegal domains relevant to the *Dusky Standard* of competence to stand trial. The instrument is intended for use with individuals age 18 years and older who have intellectual quotients of 60 or above. The ECST-R is not recommended for use with an interpreter and so requires English language proficiency. The ECST-R includes three scales related to the three prongs of the *Dusky Standard*: Consult with Counsel (CWC), Factual Understanding of the Courtroom Proceedings (FAC) and Rational Understanding of the Courtroom Proceedings (RAC). The competency portion of the interview is semi-structured and allows examiners to make additional queries as necessary to gather sufficient information about the examinee's psycholegal abilities.

The ECST-R also includes the 28-item ATP Scales, which are the focus of the present study, and are designed to identify individuals who may be feigning psychiatric symptoms and impairment in competency abilities. The ATP Scales are not intended to be the sole basis for a determination of feigning or malingering, but to allow examiners to identify examinees in need of a more comprehensive malingering evaluation and rule out the possibility of malingering in

honest responders. Unlike the competency scales, which are semi-structured, the ATP Scales are composed of structured interview questions from which the examiner should not deviate. Specific scoring criteria and instructions are included for all items and scales of the ECST-R, including the ATP Scales. The ECST-R is a nomothetic assessment and so is based on generalized, normative interpretation.

Psychometric Properties of the ECST-R

The major focus of the present study is the ECST-R ATP Scales, which will be reviewed in greater detail later; however, a brief overview of the psychometric properties of the ECST-R competency scales is warranted. The ECST-R is described as having "excellent" psychometric properties (Melton et al., 2007, p. 153). Indeed, Rogers, Jackson, Sewell, Tillbrook and Martin (2003) evaluated the psychometric properties of the ECST-R using six different samples (competency cases, mentally disordered offenders, competency restoration, feigning incompetency, jail detainees and competency referrals). The authors found internal consistencies in the range of .83 to .89 and interrater reliabilities of .98 to .99. Further, the ECST-R competency scales were shown to have excellent construct validity in terms of their fit to the three prongs of the *Dusky Standard* (mean factor loading of .72) and to have demonstrated convergent validity with the well-established competency measure, the MacCAT-CA (Hoge, et al., 1999; Rogers Tillbrook & Sewell, 2004). Lastly, the instrument has been shown to be useful with a number of different populations including forensic, correctional, mentally ill and suspected malingerers (Nortan & Ryba, 2010; Rogers et al., 2002; Rogers et al., 2004; Vitacco et al., 2007).

Despite its strong psychometric properties, there are some criticisms of the ECST-R. Specifically regarding the competency scales, Melton et al. (2007) noted that there are concerns

regarding the construction of the scales and with internal validity. The authors explained that incongruences can occur between item ratings and the overall scale interpretations. Specifically, the individual items on the competency scales are rated on a scale of 0-4 with only a 4 corresponding to an impairment in CST abilities. However, an examinee who receives multiple scores of 2 or 3 on individual items (not indicative of impairment), can receive an overall scale score that does indicate impairment. It should be noted that this criticism does not pertain to the ECST-R ATP Scales, which are scored in a different manner.

Development of the ATP Scales

The ECST-R ATP Scales (Rogers Tillbrook & Sewell, 2004) were developed from the Atypical Presentation Scale (ASP) that is used in the Georgia Court Competency Test (GCCT; Johnson & Mullett, 1987). The original ASP was developed by the first author of the ECST-R, Richard Rogers, and several of his colleagues. The ASP consists of eight items that focus heavily on unusual symptoms and experiences (i.e. psychosis). In 1995, a study was published that evaluated the efficacy of the GCCT to detect feigned incompetency to stand trial and in which the ASP was added to the standard administration of the GCCT (Gothard, Rogers & Sewell, 1995). Although the initial results were promising (Rogers, Jackson, et al., 2004), the authors of the ECST-R noted that the initial research showed that eight items were not enough to achieve a consistently high level of discriminability and further, content needed to be expanded from focusing strictly on psychosis (Rogers, Tillbrook & Sewell, 2004). In consideration, the authors developed the ECST-R ATP Scales with five different scales, incorporating psychotic and non-psychotic content.

ATP Scales: Administration and Scoring

The ECST-R ATP Scales (Roger, Jackson & Sewell, 2004) consist of twenty-eight standardized questions, divided into five scales. The administration of the ATP Scales' items differs from the remainder of the ECST-R in that the questions are not case specific. Rather, the questions and administration are standardized and items are to be administered as written without deviation or interjection of the examiner's own questions. The authors noted that administration of the competency items requires some flexibility and focus on case-specific information to ensure that sufficient data is gathered about the examinee's CST abilities specific to his/her case. However, the authors explained that the ATP items are standardized to avoid any undue influence that an examiner's additional questions or other deviation from standardization may have, such as distorting or otherwise biasing a defendant's responses.

The five ECST-R ATP Scales include ATP-Psychotic (ATP-P), ATP-Nonpsychotic (ATP-N), ATP-Realistic (ATP-R), ATP-Both (ATP-B), and ATP-Impairment (ATP-I). Rogers, Tillbrook and Sewell (2004) detailed that the ATP-P was developed to include atypical items with psychotic content, organized into four categories: delusions, ideas of reference, formal thought disorder, and bizarre perceptual disturbances. The ATP-N scale was developed to include atypical items without psychotic content. The majority of items include an affective component and are structured into two categories: "changes in physical symptoms and mental status rarely observed with affective symptoms" and "atypical suicidal impulses apparently stemming from dysphoric states" (p. 126). The ATP-R scale was developed to evaluate concerns that are germane to many criminal defendants, and as such, most defendants endorse the majority of the items on this scale. The authors noted that the items were originally intended to serve as "filler" items to mask the purpose of the ATP Scales (i.e. screen for feigning) and so do not

contribute to the overall assessment scores or determination of feigned incompetency. However, because the items are typically relevant to, and endorsed by, most defendants, the ATP-R may be utilized to detect defensiveness in examinees who under-endorse the items (raw score below 5). The two categories used in the ATP-R scale are "the desire for greater participation in the trial" and "common emotional reactions and desires related to the pending trial" (p. 126). The ATP-P, ATP-N and ATP-R scales are the main content-based scales of the malingering screen.

The ATP-B scale is a sum of the raw scores of the ATP-P and ATP-N scales, and as a result, has particularly high sensitivity (.94) regarding the identification of potential malingerers. Sensitivity refers to the true positive rate or the proportion of people who are positive in a construct, in this case feigning, with positive test results (i.e., identified as feigning). Further, the authors noted that examinees feigning psychotic symptoms tend to have elevated scores on the ATP-P and ATP-B, whereas those feigning affective symptoms typically have elevated scores only on the ATP-N scale. Lastly, the ATP-I scale is the sum of the impairment items in the ATP-P and ATP-N scales that were endorsed in the impaired competency range. This scale thus provides a score pertaining to the examinee's reported level of CST impairment, related to psychotic and non-psychotic symptoms, which can be compared to the provided cut-scores to identify potential feigning. The authors emphasized that both of the feigning scales (ATP-P and ATP-N) primarily focus on atypical symptoms, describing the "rare symptom strategy" as having been "proven effective across many measures... tested by both known-group and simulation designs" (p. 126). They also mention that the ATP-N symptoms are atypical in terms of the high degree of impairment purported to be caused by the affective symptoms. All items on the ATP Scales, aside from the ATP-I scale, are scored on a scale of 0 to 2. Specifically, items answered with a "No" are scored as 0, items answered with a "Yes" are scored as 2, and responses that are

qualified or answered with “sometimes” are scored as 1. There are two questions (items 9 and 19) that are divided into two queries. On these divided questions, the examiner only scores the second query; however, the examinee must respond affirmatively to both parts of the question in order for the item to be score as either a 1 or 2.

All items on the ATP Scales are followed by an impairment-related question, specifically related to CST abilities (“*Has this made it difficult for you to go to court and try to help yourself*?” (p. 31) which is scored as either 1 (“Yes”) or 0 (“No”). Ambiguous responses are queried with “*Can you be more definite*?” (p. 31). If ambiguity remains in the examinee’s response to the impairment question, the authors stated that examiners should not score the item as a 1 (p. 31). Lastly, it should be noted that impairment items are scored for only two of the scales (ATP-P and ATP-N) and it is the score on these items from which the ATP-I scale score is derived.

Roger, Jackson and Sewell (2004) detailed that once administration of the ATP Scales is complete, raw scores are summed in the Record Form and transferred to the Summary and Profile Forms. The Profile Form allows for transformation of the raw scores into T-Scores. Specifically, the examinee’s ATP scores are plotted on a grid provided on the Profile Form to determine T-Scores based on the standardization sample. The authors emphasized that the role of the ATP Scales is to identify potential feigners and so cut scores are set relatively low to ensure high sensitivity. However, the high sensitivity comes at the expense of low specificity, with specificity being the proportion of people without a particular construct that have negative test results (e.g., the proportion of honest responders without elevated scores). Approximately half of those identified by the ATP Scales as requiring further evaluation are likely to actually be

feigning. This reduces the risk of potential feigners being missed, while still allowing the examiner to rule out a considerable number of honest responders.

The Summary Form provides three screens for response styles (Rogers, Jackson, & Sewell, 2004). First, and as formerly noted, the ATP-R can serve as an indicator of a defensive response style. The two remaining screens on response style assess feigning through the provision of cut scores related to "Possible Overreporting" and "Ancillary Data on Feigning Competency-Related Impairment." Possible Overreporting is identified by using low cut-scores to interpret all but the ATP-R scale. The authors noted that the low cut scores minimize the risk of missing cases of potential feigning. Examinees whose scores are in the range of Possible Overreporting require a full evaluation of response styles, such as through the use of the SIRS (Rogers, et al., 1992). The "Ancillary Data on Feigning Competency-Related Impairment" also uses all but the ATP-R scale, however, provide higher scores. Additionally, this is considered ancillary data and should not be interpreted independently. Indeed, the ATP Scales are a screening measure and cannot independently determine whether an examinee is actually feigning. As such, the authors emphasize that the ancillary data should be used only after an examinee has been thoroughly evaluated for feigning using valid clinical methods and has been found to be feigning. In such circumstances, the ancillary data can provide information as to whether the examinee's feigning involves competency specific feigning, rather than being limited to other forms of feigning such as feigning psychiatric symptoms. In the current study, the ancillary data cut scores will also be used to explore the efficacy of using these cut scores when identifying potential feigners.

Research: ATP Scales and Feigning in CST Evaluations

In the majority of the studies reviewed in this section, either a simulated design or a known-groups comparison was made. In simulated designs specific to the assessment of feigning measures used in CST evaluations, participants typically are not sampled from a forensic population due to the ethical implications of coaching persons in forensic settings to feign mental illness or incompetency. As such, participants are not "genuinely" feigning symptoms or incompetency to stand trial. Rather, they are often presented with a scenario or other instruction indicating that they are being evaluated and are to feign mental illness and/or impairment to CST abilities. Because of this, the external validity of simulated designs can be low. For example, participants in simulation studies are typically offered an incentive to "fool the examiner" (i.e., successfully feign) because they do not have the motivation to feign that a defendant has (e.g., avoid legal sanctions, delay trial, etc.). However, simulated designs allow for exploration of issues such as the effects of coaching, which is an integral part of the current study, and allow for an experimental design with considerable control over variables.

Known-groups comparisons typically use an external criterion, such as the SIRS (Rogers, et al., 1992), to classify participants as likely feigning or responding honestly. These studies can be conducted with forensic populations, including examinees undergoing competency to stand trial evaluations, and so typically have high external validity. However, motivations for feigning in forensic settings may vary. Indeed, a participant identified by an external criterion as feigning could be feigning for motivations not related to competency to stand trial, such as medication seeking (Rogers, Tillbrooke & Sewell, 2004). Conceivably, feigning behaviors may differ depending on the motivation for feigning. This can present an issue for studies that focus on feigning specific to CST evaluations. Further, these studies also rely on the accurate

classification of participants into known groups using an external criterion measure. Thus, known-groups comparisons are heavily reliant on the accuracy of the external criterion, and even with a well-validated measure such as the SIRS (Rogers, et al., 1992), accurate classification for all participants cannot be guaranteed or expected. It is possible that one or more malingerers will not be identified as malingering by the external criterion, while one or more honest responders may be classified as malingering. Researchers must therefore consider their research question(s) carefully when designing a study related to feigning in forensic contexts, balancing external validity with ethical and other such considerations.

In 2002, Rogers et al. completed a study using a sample of "mentally disordered" offenders to assess the effects of feigning on several competency measures, including the ECST-R. The authors used the SIRS (Rogers, et al., 1992) as an independent method to identify and classify participants into "probably fake" and clinical groups. The authors found that the ATP content scales were effective at eliminating approximately 75% of CST cases from further consideration (i.e. screening out honest responders). The authors utilized a low cut score to emphasize sensitivity rather than specificity, as the measure is intended. The authors noted that more than 50% of the participants who exceeded their set cut-score were not actually feigning; however, the content scales were found to be very effective at accomplishing their primary goal of identifying potential feigners (sensitivity of .91). Further, when participants scored low on the content scales, there was a high probability that these participants were actually non-feigning participants (negative predictive power [NPP] of .95). NPP refers to the probability that an examinee with negative results (i.e., lack of score elevation) is actually negative in the identified construct (i.e., really is not feigning).

Rogers, Jackson, et al. (2004) assessed the efficacy of the ATP Scales as screens for feigned incompetency. The authors used samples of inpatient participants from a competency restoration program and jail detainees. The participants in the competency restoration program were administered the ECST-R, SIRS (Rogers, et al., 1992), and other tests as part of the standard psychological assessments incorporated in the competency restoration program. They were divided into clinical comparison and probable malingering groups based on their performance on the SIRS (Rogers, et al., 1992), which was used as an independent criterion for classification.

The jail detainees were administered the ECST-R first followed by either the M-FAST (Miller, 2001) or the *Schedule of Affective Disorders and Schizophrenia Change* (SADS-C; Spritzer & Endicott, 2007). The detainee participants were divided into simulation and control conditions, with the simulation design consisting of feigning and test-retest conditions. Those in the feigning condition were briefly instructed to pretend that they had a serious mental illness that prevented them from going to trial. Impairments in "working with your attorney" and "thinking through what's going on in court" were mentioned in the instructions (p. 141). The test-retest condition was used to mask the experimental condition and also was used to estimate test-retest reliability.

A manipulation check was used, including asking participants to describe the condition they were in and the amount of effort they used. Feigning participants were also asked to describe the mental disorder that they were trying to feign. However, the authors noted that these descriptions of mental illnesses "were often vague and noninformative" (p. 141).

Rogers, Jackson et al. concluded that the results of their study demonstrated "strong evidence of discriminant validity for the ATP Scales," noting extremely large effect sizes for

feigners compared to controls (simulators mean *d* = 2.25; probable malingerers mean *d* = 2.74). Further, the authors compared feigners to genuine inpatient participants enrolled in a competency restoration program and still found large effects sizes (mean *d*s of 1.75 and 1.90). The authors detailed that effect sizes were generally comparable across control and clinical comparison samples and in simulation and known-groups comparisons, supporting internal and external validity. At the individual item level, data supported discriminability (mean *d* = .90) and the items functioned in their predicted directions. It should be noted that sensitivity was emphasized in the current study and, regarding the previously reported data, cut scores for the scales were set low in accordance. However, the authors also used various cut scores to examine the sensitivity and specificity of the ATP-BI (combined impairment scores for ATP-B and ATP-I scales), and all other scales aside from the ATP-R scale. They found that sensitivity ranged from .50 to .90, while specificity ranged from .60 to 1.00 using cut scores ranging from >0 to >14. For example, a specificity of 1.00 was found only after raising the ATP-BI cut score to > 14; however, this reduced the sensitivity to .50 (only identifying half of the probable malingerers). On the other hand, using a cut score of > 1 for the ATP-P scale led to a sensitivity of .90, but reduced the specificity to .72.

Vitacco et al. (2007) researched the efficacy of the M-FAST (Miller, 2001), ATP Scales (Rogers, Tillbrook & Sewell, 2004), and the Structured Inventory of Malingered Symptomology (SIMS; Widows & Smith, 2009) for identifying potential malingerers in a sample of inpatient participants undergoing CST evaluations. The authors used the SIRS (Rogers, et al., 1992) as an external criterion to classify participants as either non-malingerers or probable malingerers. Regarding the ATP Scales, the authors found that ATP-P was the most effective scale, failing to identify only one probable malingerer (sensitivity = .90, NPP = .95). All other scales

demonstrated a sensitivity of at least .90. The authors concluded that the ATP Scales demonstrated good homogeneity and excellent discriminant validity.

Vitacco, Rogers, and Gabel (2009) researched the effects of feigning incompetency to stand trial on the ECST-R. The authors used a sample of male defendants undergoing competency to stand trial evaluations, and used the SIRS (Rogers, et al., 1992) and court rulings to classify participants into three groups: probable feigning, genuine competent and genuine incompetent. All participants were administered the ECST-R in full, as well as the SIRS and the *Wechsler Abbreviated Scale of Intelligence* (WASI; Wechsler, 1999). The data demonstrated that the ATP Scales have good convergent validity when compared to the primary scales of the SIRS, although the ATP-N scale had a somewhat lower correlation. The findings of this study are particularly notable, as the SIRS is often considered the "gold standard" for a comprehensive malingering evaluation (Boccaccini, et al., 2006) and the ATP Scales, although only a screener, demonstrated good convergent validity with the far more comprehensive SIRS.

Springman and Vandenberg (2009) studied whether coaching participants to malinger would enable them to elude detection by CST measures, including the ECST-R and GCCT (Johnson & Mullett, 1987). The authors used undergraduate participants who were randomly assigned to one of three conditions: honest responders (control condition), uncoached malingerers (feign incompetency without instruction) and coached malingerers (feign incompetency with instruction). The coached group received tips on how to feign general mental illness that causes impairment to CST abilities without being detected. For example, participants were instructed to refrain from endorsing items with overly bizarre content. The authors found that the ECST-R ATP Scales reliably distinguished malingerers from honest responders, even when the participants were coached in malingering. Indeed, the authors noted that little

difference was found in malingering scores of the coached versus uncoached participants. The authors pointed to past research which shows that other measures, such as the MMPI-2 (Butcher, et al., 2001), are susceptible to the effects of coaching on avoidance of detection by validity indicators and so not being impacted by coaching may be a relative strength of the ATP Scales.

Lastly, Springman and Vandenberg (2009) found that 47% of honest responders were misclassified as potentially feigning when using a cut-score of more than 5 for the impairment ratings of the ATP-P and ATP-N combined (ATP-BI). This is similar to other research studies and findings that utilize a low cut score, as does the ECST-R norms, to ensure the identification of potential malingerers. The results of this study demonstrated that the ATP Scales were effective in such identification, accurately classifying 97% of coached and uncoached malingerers as potentially feigning.

Norton and Ryba (2008) evaluated the efficacy of the ECST-R using coached and honest responders. The authors used undergraduate students as participants and assigned them to an honest responders (control condition) or feigning group. The feigning group received written instructions on how to appear mentally ill, with a focus on psychotic symptoms. The authors found that honest responders and coached feigners differed significantly on all of the ECST-R ATP Scales, with the coached feigners being significantly more likely to be identified as feigning or defensive. Indeed, 92% of coached feigners were accurately classified as possible feigners. However, the ATP Scales also identified a large portion of the honest responders as needing further evaluation. In fact, only 55% of those identified by the ATP Scales as needing further evaluation were actually coached feigners, with the remaining 45% being honest responders. This finding is again consistent with the low cut scores used in the ECST-R ATP Scales to reduce the risk that feigners would not be identified. Norton and Ryba noted that, regarding the

use of feigning screeners in a CST evaluation, the identification of non-feigners as potentially feigning (false-positives) is a "better" error than failing to identify potential feigners (false negatives); hence, the emphasis on sensitivity at the cost of specificity.

M-FAST

Overview of the M-FAST

The M-FAST (Miller, 2001) is a structured interview designed to identify persons in forensic settings who are potentially malingering psychopathology. The measure consists of twenty-five items, divided amongst seven scales, and takes approximately five to ten minutes to administer. The M-FAST is intended for persons aged 18 years or older, and has been published in English, Korean and Spanish. The M-FAST was designed using the SIRS (Rogers, et al., 1992), operationalizing interviewing techniques and response styles that are validated to identify malingerers. Four of the M-FAST scales use similar detection strategies as the SIRS, including Unusual Hallucinations (UH), Rare Combinations (RC), Extreme Symptomatology (ES), and Reported versus Observed (RO) (Vitacco et al., 2009). These scales assess response styles as indicated in their respective names. Specifically, UH incorporates hallucinatory symptoms that are rarely reported amongst genuinely psychotic persons; RC contains combinations of symptoms that rarely or never occur together; ES assesses the reporting of an extreme number of symptoms and extremely severe symptoms; and RO screens for differences in behavior as compared to reported symptoms.

The three remaining scales are Suggestibility (S), Unusual Symptom Course (USC), and Negative Image (NI). Potential malingerers can be prone to suggestion in an attempt to appear mentally ill, which is detected by the S Scale. Miller (2013) provided the example of a potential suggestibility item being that examinees are told, "people with severe mental illness cannot

concentrate for a long time without seeing little green men" (p. 271). At the end of the interview, some malingerers reported hallucinating little green men. The USC Scale assesses for reporting of a sudden onset or cessation of symptoms, such as severe symptoms of psychosis abruptly appearing one day, which is contradictory to the typical gradual onset of severe mental illness. Lastly, the NI scale was created because some malingers believe that they should be viewed in a negative manner and so may have an increased tendency to endorse self-deprecating items (Miller, 2013).

The M-FAST, like the ATP Scales, is intended to serve as a screening measure only. Examinees identified as potentially malingering require a more comprehensive malingering evaluation and should not be definitively identified as malingering based on M-FAST scores alone (Miller, 2001).

Psychometric Properties of the M-FAST

The M-FAST (Miller, 2001) has been validated in both simulation and known-groups designs and with a variety of populations, including examinees in civil hospitals, prison, on probation, in forensic hospitals, and persons undergoing outpatient disability assessments (Miller, 2013). The measure has also been validated across gender, with various racial and ethnic groups (Miller, 2013), and for use with literate and illiterate examinees (Miller, 2005). The M-FAST demonstrates strong psychometric properties, including high internal consistency (Total Score $\alpha = .91$) and reliability (M-FAST Total Score = .92; 25 M-FAST items = .93; Miller 2001; Jackson, Rogers, & Sewell, 2005). Further, across three known-groups and one simulation study, criterion validity was demonstrated through consistent significant differences in the M-FAST Total Scores between honest responders and malingerers (significant at the $p < .01$ to $p < .001$ levels; Miller, 2001). Lastly, studies using the Minnesota Multiphasic Personality Inventory-2

(MMPI-2; Butcher et al., 2001) and the SIRS (Rogers et al., 1992) demonstrated both convergent and discriminant validity.

M-FAST: Administration and Scoring

As the M-FAST is a structured interview, all items should be administered strictly as written. Items may be repeated one time; however, no further elaboration or explanation can be provided to examinees. Twenty-two of the 25 items require one of the following responses: "True" or "False;" "Always," "Sometimes," "Never;" or "Yes or "No" (Miller, 2004). The remaining three items, although answered with a "yes" or "no," require the examiner to observe the examinee for consistency between behavior and self-reported symptoms. If an item is endorsed ("True"; "Yes"; "Always"; Sometimes"), the item is scored as 1, whereas if the item is not endorsed ("False"; "Never"; "No"), the item is scored as 0.

Miller (2001) provided guidance for interpretation of scores based on the Total Score, the seven individual scales and individual items. The Total Score provides an estimate of the likelihood that an examinee is malingering mental illness, while the individual scales provide information about *how* the examinee is malingering (response styles). It should be noted that the individual scales are not designed to be used as an estimate of the likelihood of malingering as is the Total Score. Because the current study is interested in the ability of the measure to identify potential malingerers, only the Total Score will be used. To calculate the Total Score, the examiner calculates the sum of the scores from each item. Miller recommends using a cut-score of ≥ 6 on the Total Score to emphasize sensitivity.

Research: M-FAST and Feigning in CST Evaluations

Miller (2004) evaluated the M-FAST using a sample of criminal defendants who were already found incompetent to stand trial. Participants were classified as either honest responders

or malingerers based on their performance on the SIRS (Rogers et al., 1992) and then administered the M-FAST followed by the MMPI-2 (Butcher et al., 2001). Using this known-groups comparison, the author found that a cut score of $\geq$ 6 for the Total Score demonstrated an overall correct classification rate of 86%, with high sensitivity (93%) and specificity (83%). Miller also found moderately high correlations between the M-FAST Total and individual Scale scores and the MMPI-2 "Fake Bad" indicators (.35 to .78). The author found nonsignificant or negative correlations between the M-FAST Total Score and MMPI-2 Defensiveness indicators (-.09 to -.48), as was expected.

Jackson et al. (2005) used both simulation and known-groups designs to assess the efficacy of the M-FAST in identifying potential malingerers. The authors used participants from a county jail in the simulation condition as well as for the control group. Participants from a competency restoration program were administered the SIRS (Rogers, et al., 1992) and categorized into suspected malingering and clinical comparisons groups, allowing for known-groups comparison. In this study, the M-FAST demonstrated excellent internal consistency (α = .91) for the Total Score, but the majority of the subscales evidenced marginal internal consistency (α = .63 - .65). The authors found that, using a cut-score of $\geq$ 6, the M-FAST accurately classified 86% of the sample (NPP = .91) and was moderately accurate in identifying genuine feigners (Positive Predictive Value [PPP] =.74). PPP refers to the probability that examinees whose scores are elevated are genuinely positive in the identified construct (i.e., are genuinely feigning). The M-FAST Total Score demonstrated large effect sizes when comparing genuine competency referrals to feigners (d = 1.47) and malingerers (d = 2.80). Indeed, feigners and malingerers had significantly higher Total Scores than other groups. The authors concluded

that their study demonstrates evidence for the utility of the M-FAST as a screener for feigning of mental illness in competency evaluations.

Guy, Kwartner, and Miller (2006) studied the ability of the M-FAST to identify potential malingering in participants coached on feigning a particular mental illness. Specifically, the authors coached a sample of undergraduate participants on how to feign one of the following illnesses: Schizophrenia, Major Depressive Disorder, Bipolar Disorder, or Posttraumatic Stress Disorder. The participants were administered the M-FAST and their scores were compared to those of genuinely mentally ill patients with the same diagnoses. The clinical comparison group was comprised of forensic psychiatric patients, civil psychiatric inpatients, general population prisoners receiving mental health services, and disability claimants applying for outpatient mental health treatment. The authors found that the Total Score demonstrated excellent internal consistency ($\alpha = .88$), although results for the individual scales were more variable. The largest effect sizes were found for discriminating participants simulating Schizophrenia from clinical comparison participants, although significant differences were found between all simulation groups and their respective clinical comparison groups ($F = 11.1$ [PTSD] to 42.6 [Schizophrenia]; $p < .01$). The authors concluded that their results support only the Total Score as a reliable index for identifying malingering; however, this study demonstrated that the M-FAST is able to identify malingerers for all four simulated mental illnesses, even at relatively low base rates.

Vitacco et al. (2007) researched the efficacy of the M-FAST (Miller, 2001), ATP Scales (Rogers, Tillbrook & Sewell, 2004), and the Structured Inventory of Malingered Symptomology (SIMS; Widows & Smith, 2009) in identifying potential malingerers in a sample of inpatient participants undergoing CST evaluations. The authors used the SIRS (Rogers, et al., 1992) as an

external criterion to classify participants as either non-malingerers or probable malingerers. Using a cut score of ≥ 6 in their study, the authors found that the M-FAST demonstrated excellent sensitivity (1.00) and specificity (.90). Further, the M-FAST demonstrated moderately high accuracy in identifying genuine malingerers (PPP = .72). The authors concluded that the M-FAST is effective for its intended purpose, screening for potential malingerers, but noted the high false-positive rate that inhibits its use as a comprehensive measure of malingering. Lastly, the authors noted that the individual M-FAST scales do not appear to provide any advantage above the Total Score.

Summary

In sum, research shows that the ATP Scales and the M-FAST demonstrate strong psychometric properties in terms of identifying potential feigners undergoing CST evaluations. Some of the research suggests that the ATP-Scales demonstrate a comparable sensitivity to the M-FAST, although a lower specificity. Research further suggests that the ATP Scales are effective in identifying potential feigners even amongst those coached in feigning. This latter research has thus far entailed coaching participants on how to feign mental illness with a focus on psychotic symptoms (Norton and Ryba, 2008), providing participants with tips on how to feign general mental illness that caused competency impairment (Springman & Vandenberg, 2009), or instructing participants to pretend that they had a serious mental illness that prevented them from going to trial, with general tips provided on competency impairment (Rogers, Jackson, et al., 2004).

Current Study

The current aimed to use a simulated design to assess the ability of the ECST-R ATP Scales to identify feigning in participants coached on feigning incompetency, specific mental illness

(i.e., Schizophrenia), or feigning both incompetency and a specific mental illness. Another goal was to explore whether the ATP Scales' incorporation of both symptomatology and CST specific impairments in screening for feigning is more effective than if the measure screened only for feigned incompetence to stand trial or feigned psychiatric symptoms alone. Further, the study aimed to evaluate whether those *coached* on how to feign mental illness and/or incompetency to stand trial could be accurately identified by the ATP Scales as feigning. This was intended to potentially lend support to or contradict prior research suggesting the utility of the ATP Scales with coached participants (Springman & Vandenberg, 2009; Norton & Ryba, 2008), and further, expand upon this prior research. Indeed, unlike past research, the current study incorporated an experimental group of participants coached only to feign incompetency to stand trial, in addition to groups feigning mental illness alone and mental illness and incompetency combined. Coaching instructions were based on information readily found on the internet to increase ecological validity, but again expanding upon prior research, provided detailed information on how to feign incompetency, mental illness, or both, including diagnostic-specific information for the mental illness group (i.e., Schizophrenia) based on the DSM-5 (APA, 2013).

As discussed, coaching can be a relevant concern in forensic evaluations, as examinees can learn a considerable amount of information about how to present themselves through libraries and the internet (Ruiz, Drake, Glass, Marcotte, & van Gorp, 2002; Melton et al., 2007), and a fair number of examinees have considerable discussion with their attorneys about the evaluation process prior to being evaluated (Lees-Haley, 1997; Melton et al., 2007). Additionally, those coached on how to effectively malinger could conceivably be the most difficult to detect by assessment measures and, as such, demonstration of a measure's ability to detect such persons could further validate its use and efficacy.

The diagnosis that was feigned in the current study was Schizophrenia. This disorder was chosen due to the aforementioned association between clinical judgments of incompetence and Schizophrenia (Melton et al., 2007), and the evidence that psychotic symptoms may be more commonly feigned in forensic settings (Cornell & Hawk, 1989). Lastly, Schizophrenia has been used in previous studies addressing feigned symptomatology in CST evaluations (Rogers, Sewell, Grandjean, & Vitacco, 2002; Guy, Kwartner, & Miller, 2006).

Given that competency to stand trial examinees often rely on more than one strategy to feign impairment (Gottfried, Vitacco, & Steadham, 2017; Gottfried & Glassmire, 2015; Vitacco et al., 2009), the present study also compared the performance of the ATP Scales and the M-FAST in terms of their ability to screen for potential feigning in the aforementioned groups of participants to investigate whether the ATP Scales are more effective in identifying feigning amongst CST examinees than a screening measure constructed to identify only feigned psychopathology. This further allowed exploration of the utility of these measures with individuals who use one or more feigning strategies.

Hypotheses

The following predictions were made based on the reviewed literature:

H1: It was expected in the present study that more participants in the experimental (feigning) groups would have elevated scores on all of the ATP Scales, aside from the ATP-R scale, and on the M-FAST Total Score when compared to the control group (honest responders).

H2: Although the study used the cut scores provided in the manuals that emphasize sensitivity, it was expected that the majority of the honest responders would *not* be identified by either measure as potential feigners due to the likelihood that most, being undergraduate students, would not endorse items or impairment on the ATP Scales.

H3: It was expected that the ATP Scales would identify the highest number of potential feigners in the feigning schizophrenia and incompetency combined group, but would accurately identify the majority of feigners in all of the experimental groups as potential feigners and accurately classify the majority of the control group as non-feigners.

H4: The ATP Scales would be more effective than the M-FAST in identifying feigning participants in the coached incompetency group and the combined coached incompetency and coached Schizophrenia groups.

H5: Although both measures were expected to accurately classify the majority of participants in the coached mental illness group as potential feigners, it was hypothesized that the ATP Scales would demonstrate overall higher sensitivity, but lower specificity than the M-FAST.

CHAPTER 3

METHODS

Participants

Participants in the study were recruited through the Indiana University of Pennsylvania (IUP) Psychology Subject Pool. Individuals from the subject pool were enrolled in Introduction to Psychology courses at IUP. Participation was on a completely voluntary basis, although IUP undergraduate students are required to complete a total of six research credits through participation in studies of their choice or completing article summaries. Recruitment occurred over the course of two semesters. It was required that all participants be at least 18 years of age. Participants included only those who were not screened out based on the exclusion criteria entailed in the Screening Questionnaire that was administered through Sona systems, which is described in the Procedure section below (also see Appendix F). A total of 61 participants (42 females, 19 males) enrolled in the current study and scheduled an appointment time for participation. Of these 61 participants, 11 did not show-up, for a total of 50 participants (33 female, 17 male) who completed participation. All participants who successfully completed the study received one research credit for their participation.

Design

The current study used a simulated between-groups experimental design. Specifically, two coached feigning groups (feigned mental illness; feigned incompetency and mental illness, combined) were utilized for the identified diagnosis (Schizophrenia). An additional group was coached to feign incompetency to stand trial only and a final group of honest responders served as the control group.

Procedure

This study was conducted in Uhler Hall at IUP over the course of two semesters and was conducted by trained graduate students in the Clinical Psychology Doctoral program at IUP. Given that the author created the instructions for participants, the author did not run any participants to ensure the experimenters remained blind to the conditions. Participants voluntarily enrolled in this study through the IUP Subject Pool and Sona Systems (a description of the study as shown on Sona Systems can be found in Appendix I). Upon enrollment into the subject pool, all students are required to complete a series of prescreening self-report measures to identify eligibility for research studies with specific inclusion criteria. For this study, participants were asked about their exposure to and knowledge of mental illness and competency to stand trial (see Screening Questionnaire Appendix F). Participants who self-identified having a history of serious mental illness or considerable knowledge or exposure to mental illness or CST were automatically excluded from further participation in the study (i.e., those who endorse "3" or above or "yes"). This information was pertinent, as any such extensive experience could have influenced participants' performance during testing, causing deviation from the standardized instructions. The remaining subject pool participants were eligible for participation in the study and had the option to voluntarily enroll via Sona Systems.

Prior to the study, each participant was randomly assigned to one of the three experimental groups or the control condition using a random number generator (1-120); feigning instructions specific to the respective groups were placed in manila folders, one for each participant, with only the participant number written on the folders. As participants enrolled in the study via Sona Systems, they were assigned participant numbers in the order in which they enrolled, and each number was associated with a randomly assigned condition.

On their respective testing dates, all participants in all conditions were asked to complete informed consent for their participation (Appendix G). The participants received written instructions specific to their group and, depending on their assigned condition, were provided with five to twenty minutes to read the instructions and prepare. The instructions detailed that participants who put forth adequate effort and followed the instructions would be entered into a drawing to win one of three gift cards in the amount of $100, $50, or $25. This incentive was offered to provide motivation to participants, given that participants otherwise had no strong incentive to "feign" (i.e., follow instructions), unlike examinees in genuine CST evaluations. Participants in all conditions were then administered the ATP Scales and the M-FAST in a counterbalanced fashion to negate any order effects of administration. Both measures were administered and scored by the researchers according to the standard instructions in their respective administration manuals, with only the Total Score of the M-FAST used for analyses. The cut-scores for both Possible Overreporting and Ancillary Data on Feigning Competency-Related Impairment were used to score the ATP Scales. As previously mentioned, when using the ATP Scales for clinical purposes, the ancillary data should only be used after a determination of malingering has been made and can provide information as to whether an individual is malingering competency impairment. This study utilized these cut-scores in addition to the overreporting cut-scores to explore their efficacy in identifying feigning participants.

Experimenters administering the measures were blind to the participants' group assignments. To ensure that experimenters remained blind to condition, feigning instructions were distributed in closed manila folders with only the participants' numbers on the folders and participants were instructed to refrain from providing any information to the experimenter about their instructions. Although all participants were allowed to refer to their instructions during the

experiment as needed, the instructions were kept in the manila folders and participants were informed that they should not allow the evaluator to see their instructions. Experimenters were informed of this procedure so that they did not construe the participants' behavior (i.e., when the participants referred to the instructions) as part of the experimental manipulation and were instructed to refrain from reading any of the participants' materials.

Following completion of administration of the ATP Scales and M-FAST, participants were asked to complete the Manipulation Check Questionnaire (Appendix E). To encourage candid responses, participants were identified on the questionnaire only by their assigned participant number and left the completed questionnaire in the closed manila folders. To encourage full completion of the questionnaire, participants were informed that the questionnaire is an integral part of the study and the experimenter remained in the room with them during completion, although engaged in other tasks to encourage candid responding (i.e. reading materials, etc.).

Exclusion criteria for participants based on the Manipulation Check Questionnaire (Appendix E) included participants who were unable to provide a description of the instructions, provided a grossly inaccurate description of instructions, or who rated their comprehension of instructions as "0." Additionally, participants who indicated that they put forth little to no effort and/or who indicated that they severely deviated from the instructions were excluded from data analysis. Participants were also ruled out if they indicated that prior knowledge or exposure to mental illness and/or CST heavily influenced their participation. Lastly, any participants who indicated that they knew detailed information (i.e. purpose and procedures) about the study prior to participating (e.g., talked to a fellow student who previously completed the study) were excluded.

All participants were thoroughly debriefed (Appendix H) following test administration. They received a paper copy of the debriefing form (Appendix H) and were encouraged to ask any questions about the study and inform the experimenter of any concerns. They were informed via the debriefing that all participants were actually entered into a drawing for a gift card and were asked to provide their IUP or other email addresses which would be used for the drawing. Upon completion of data collection, a number was assigned to each email address and a random number generator was used to select winners of the drawing. Participants could win only one gift card.

Materials

Screening Questionnaire (Appendix F)

The Screening Questionnaire is a self-report questionnaire that screened participants for their history, knowledge of, and exposure to mental illness and CST issues using Likert-type scales of 0-5 (None to Extensive). The screening questionnaire was administered as a part of the pre-screening self-report measures required of all participants enrolled in the IUP Subject Pool.

Participant Instructions (Appendices A-D)

All participants received written feigning instructions specific to their assigned groups. Common to all instructions was a written vignette detailing that the participant was drinking alcohol at a house party and got into a fight with a peer. During the fight, the participant broke a glass over the peer's head, causing a head injury. The participant has been charged with Aggravated Assault, which in Pennsylvania is a second-degree felony and carries a penalty of up to 10 years in prison. If the participant is found guilty, not only could the participant be incarcerated in prison, but also incur significant legal and restitution fees and be expelled from IUP.

For all experimental groups, instructions state that participants want to avoid trial and potential punishment by pretending that they are unable to participate in trial. Instructions detail that they are about to undergo an evaluation as part of the pre-trial proceedings, during which time, they are to "fool" the evaluator into believing that they do not have the ability to stand trial. Instructions include a warning that participants should not be "caught faking" by the examiner. Participants were also informed via the written instructions that they would be entered into a drawing for one of three Visa gift cards (worth $100, $50, and $25) if they could successfully "fool" the examiner into thinking that they were genuinely unable to stand trial (i.e., not identified as feigning). However, all participants were actually entered into the drawing. Lastly, participants in all groups, control and experimental, were informed that they should carefully follow the instructions provided to them, although they would not be able to ask the experimenter questions about the instructions and should not in any way tell the experimenter what their instructions were.

Those in the feigning mental illness group were provided with written instructions on how to feign Schizophrenia (Appendix A). Instructions are based on the DSM-5 (APA, 2013) criteria and other information found through an internet search on how to fake psychopathology. Specifically, Google search results for "Schizophrenia" as well as search results for "how to fake Schizophrenia" were used (Hower, 2015; Resnick, P. & Knoll, J., 2005). Participants in the feigning Schizophrenia group did not receive any coaching on CST abilities, CST requirements, or any other information pertaining to feigning incompetency to stand trial.

Participants in the feigned incompetency to stand trial group were provided with written instructions (Appendix B) coaching them on how to feign incompetency with a focus on CST abilities and potential impairments to CST abilities that could render them incompetent. The

instructions (Appendix B) are again limited to information that was readily found on the internet. Instructions are partially based on Google search results for "competency to stand trial" and "how to fake incompetency to stand trial" ("Competency To Stand Trial," n.d.; "Competency To Stand Trial Evaluations," n.d.; "Juvenile and Adult Training for Competency to Stand Trial," n.d.). This group did not receive coaching on how to feign mental illness. CST abilities and related impairments described to the participants were based on the three-prong model of the *Dusky Standard*.

Lastly, the group combining coached feigning of mental illness and coached feigning of incompetency received instructions (Appendix C) that incorporated the instructions of the feigned mental illness and feigned incompetency groups (i.e. they were coached on how to feign having Schizophrenia as well as how to feign incompetency to stand trial). This group was instructed that when asked about competency abilities, if applicable, their responses should demonstrate that their assigned symptoms cause their CST impairments.

Participants in the control condition were provided with the same case vignette as all other participants, but were asked to respond honestly to the questions (Appendix D). They were informed that they would be entered into the drawing for one of the three Visa gift cards if they demonstrated good effort and followed the instructions; however, all participants were actually entered into the drawing.

ECST-R ATP Scales

The *Evaluation of Competency to Stand Trial-Revised Atypical Presentation Scales* (ECST-R ATP Scales; Rogers, Tillbrook and Sewell, 2004) are an integral part of the ECST-R, an assessment tool designed to assess competency to stand trial. The ATP Scales are designed to assess for feigned incompetency to stand trial, and as described in detail in the literature review,

the scales are composed of twenty-eight standardized questions divided amongst five scales. The ATP Scales demonstrate large effects sizes when differentiating feigners from honest responders, including genuinely mentally ill patients (*M d* = 1.90; Rogers, Tillbrook, & Sewell, 2004; Rogers, Jackson et al., 2004; Vitacco et al., 2009) and have strong interrater reliabilities (*M* r = .99; Rogers, Grandjean, Tillbrook, Vitacco, & Sewell, 2001; Vitacco et al., 2009).

M-FAST

The Miller Forensic Assessment of Symptoms Test (M-Fast; Miller, 2001) is an interview designed to screen for feigning of symptoms in forensic settings, as described in detail in the literature review. The assessment consists of 25 items organized into seven scales. Based on the original validation research, the M-FAST demonstrates strong psychometric properties with a total score alpha coefficient of .91 (Miller 2001; Jackson, Rogers, & Sewell, 2005), high construct validity (Miller, 2001), and strong convergent and discriminant validity with the MMPI-2 and SIRS (Miller, 2001).

Manipulation Check (Appendix E)

The Manipulation Check Questionnaire includes a number of questions to ensure that participants comprehended and followed the instructions given to them and put forth adequate effort. Participants were asked information that was primarily tailored to their individual groups, although some questions were common to all groups. For example, the incompetency feigning group was asked to briefly describe how they feigned incompetency and what CST abilities they feigned impairments in. All participants, to ensure adequate comprehension of instructions, were asked to briefly describe the instructions provided to them and rate their comprehension on a Likert scale of 0-3. They were also asked to rate how well they followed instructions and how much effort they put forth, using Likert scales of 0-3. Participants who indicated that they

deviated from their instructions were asked to briefly describe how they deviated (e.g., feigned symptoms not assigned to them). Participants were asked if any prior exposure to or knowledge of mental illness or CST influenced their participation, and if so, to briefly describe how this influenced their participation. Lastly, all participants were asked if they knew detailed information about the study prior to participating (e.g., talked to a fellow student who previously completed the study about the procedures or purpose).

CHAPTER 4

RESULTS

Data Included in Analyses

Of the 61 participants who enrolled in the study, 11 did not show-up, for a total of 50 participants (33 female, 17 male) who completed participation. After review of the manipulation check, data from another 11 participants were excluded from analyses because these participants indicated that they did not follow instructions. This included exclusion of 2 participants from the schizophrenia group, 5 from the incompetency group, 2 from the combined group, and 2 from the control group. For example, the 2 excluded participants in the control group reported that they feigned having a mental illness. In sum, data was analyzed for a sample of 39 participants (*n*=39), composed of 25 females and 14 males aged 18 years and older. There were 6 females and 4 males in the schizophrenia condition (*n*=10), 7 females and 1 male in the incompetency condition (*n*=8), 5 females and 3 males in the combined condition(*n*=8), and 7 females and 6 males in the control condition (*n*=13).

Analyses

Given the higher number of females than males included in the data analyses (females *n* = 25; males *n* = 14), Fisher's Exact Test (at the $\alpha = .05$ level) was used to assess for statistically significant differences in the numbers of males vs. females identified by the M-FAST and ATP-Scales as potentially feigning, but no such differences were found. These results are shown in Table 1 below. Fisher's Exact was used rather than Chi-Square given that more than 20% of the expected counts were less than 5 (Yates, Moore & McCabe, 1999).

Table 1
Fisher's Exact Test: Gender

Measure/Cut-Score	**Exact Sig. 2- sided**
ATP Scales/Possible Overreporting	*p*= 1.00
ATP Scales: Ancillary Data on Feigning Competency Impairment	*p=.446*
M-FAST Total Score	*p=1.00*

Tests of homogeneity of variance (Levene's Test) of the M-FAST, ATP-I and ATP-B scores revealed that both the ATP-I and ATP-B scores violated the assumption of homogeneity of variance required for parametric tests. Results are listed in Table 2 below. In consideration of this assumption violation, in addition to the small sample size and concern regarding violation of normality, nonparametric testing was used to analyze the data in the current study.

Table 2
Levene's Test of Equality of Error Variances (α =.05)

Measure/Score	Levene Statistic	df1	df2	Sig.
M-FAST Total Score, based on mean	2.782	3	35	.055
M-FAST Total Score, based on median	2.610	3	35	.067
ATP-I, based on mean	4.430	3	35	.010
ATP-I, based on median	3.419	3	35	.028
ATP-B, based on mean	4.110	3	35	.013
ATP-B, based on median	3.020	3	35	.043

Hypothesis 1

Hypothesis 1 (H1) stated: It is expected in the present study that more participants in the experimental (feigning) groups will have elevated scores on all of the ATP Scales, aside from the ATP-R scale, and on the M-FAST Total Score when compared to the control group (honest responders).

This hypothesis was confirmed. None of the participants in the control condition (n = 0) had elevated scores on the M-FAST. Although 76.9% (n = 10) of participants in the control condition had elevated scores on the ATP Scales when using the Possible Overreporting cut scores, this was lower than the 100% of participants in all other conditions that had elevated

scores (Schizophrenia n = 10; Incompetency n = 8; Combined n = 8). When using the cut-scores for Ancillary Data on Feigning Competency-Related Impairment, 46.2% (n = 6) of participants in the control condition had elevated scores on the ATP Scales, but this was again lower than the 75-100% of participants with elevated scores in the other conditions (Schizophrenia 100%/n = 10; Incompetency 75%/n = 6; Combined 87.5%/n = 7). Results are shown in Table 3 below.

Table 3
Descriptive Statistics: Participants Identified as Feigning

Measure/Cut-Score/Condition	Cut Score	*n* Feigning	%Feigning
M-FAST Total Score Overall	$\geq$ 6	18/39	46% (.462)
Schizophrenia	$\geq$ 6	9/10	90% (.90)
Incompetency	$\geq$ 6	2/8	25% (.25)
Combined	$\geq$ 6	7/8	87.5% (.875)
Control	$\geq$ 6	0/13	0%
ATP Scales: PO *	**	36/39	92% (.92)
Schizophrenia	**	10/10	100% (1.00)
Incompetency	**	8/8	100% (1.00)
Combined	**	10/10	100% (1.00)
Control	**	10/13	76.9%
ATP Scales: ADFCRI**	****	29/39	74.3% (.743)
Schizophrenia	****	10/10	100% (1.00)
Incompetency	****	6/8	75% (.75)
Combined	****	7/8	87.5% (.875)
Control	****	6/13	46.2% (.462)

Note: *This refers to overall data for the ATP Scales using the cut-scores used to determine a Possible Overreporting (PO) Response Style **The cut-scores recommended for determination of PO are ATP-P >1; ATP-N >0; ATP-I >1; and ATP-B >2. ***This refers to overall data for the ATP Scales using the cut-scores used for Ancillary Data on Feigning Competency- Related Impairment Response Style ****The cut-scores recommended for determination of ADFCRI are ATP-P >4; ATP-N >2; ATP-I >1; and ATP-B >6.

Hypothesis 2

Hypothesis 2 stated that although the study will use the cut scores provided in the manuals that emphasize sensitivity, it is expected that the majority of honest responders will not be identified by either measure as potential feigners due to the likelihood that most, being undergraduate students, will not endorse items or impairment on the ATP Scales.

This hypothesis was partially supported. It was confirmed using the M-FAST total score and the cut-scores for Ancillary Data on Feigning Competency-Related Impairment on the ATP Scales; however, when using the lower cut-scores for Possible Overreporting, the ATP Scales incorrectly identified 76.9% (n =10/13) of the control condition participants as feigning. Please see Table 2 above.

Hypothesis 3

Hypotheses 3 stated that it is expected that the ATP Scales will identify the highest number of potential feigners in the feigning schizophrenia and incompetency combined group; however, the ATP Scales will accurately identify the majority of feigners in all of the experimental groups as potential feigners and accurately classify the majority of the control group as non-feigners.

As noted, when using the lower cut-scores for potential overreporting, the ATP Scales incorrectly identified 76.9% (n =10/13) of the control condition participants as feigning and also identified 100% of participants in all of the experimental groups (Schizophrenia n = 10/10; Incompetency n = 8/8; Combined n = 8/8). Thus, the efficacy of the ATP Scales with identifying feigning participants was equivalent across groups, rather than identifying the highest number of participants in the combined group as was hypothesized. When using the more stringent cut-scores for ancillary data, the ATP Scales actually identified the most participants in the Schizophrenia group (100%; n = 10/10), second most in the combined group (87.5%; n = 7/8), and overall classified the majority of participants accurately (Incompetency 75%/n = 6/8; Control 53.8%/n = 7/13; Across groups 77%/*n* = 30/39). These latter results suggest that when using the more stringent cut-scores, the ATP Scales were most sensitive to feigning of psychotic symptoms.

Hypothesis 4

Hypothesis 4 stated: the ATP Scales will be more effective than the M-FAST in identifying feigning participants in the coached incompetency group and the combined coached incompetency and coached Schizophrenia group.

This hypothesis was confirmed when using the lower cut-scores on the ATP Scales for possible overreporting (ATP Scales: Incompetency 100%/n = 8/8; Combined 100%/n = 8/8; M-FAST: Incompetency 25%/n = 2/8; Combined 87.5%/n = 7/8), but results for the combined condition were comparable when using the more stringent cut-scores for Ancillary Data on Feigning Competency-Related Impairment (ATP Scales: Incompetency 75%/n = 6/8; Combined 87.5%/n = 7/8; M-FAST: Incompetency 25%/n = 2/8; Combined 87.5%/n = 7/8). Please reference Table 2 for a list of all frequencies/percentages.

To provide further analyses of the performance of the measures, the Fisher-Freeman-Halton Exact Test was used to assess for independence between the conditions and determination of feigning for the M-FAST and ATP Scales, using the cut-scores for both Possible Overreporting and Ancillary Data on Feigning Competency-Related Impairment (ADFCRI) for the ATP Scales. It should be noted that this statistical test was selected for these analyses given the aforementioned concern regarding expected counts and considering the contingency was more than 2x2, to which Chi-Square and Fisher's Exact Test are limited. Statistically significant differences were found for the M-FAST Total Scores ($p<.001$) and cut-scores for ADFCRI on the ATP Scales ($p=.015$), but not when using the cut-scores indicative of Possible Overreporting ($p=.167$). These results are displayed in Table 4 below. This suggests that the determination of feigning (i.e., participants identified as feigning or not feigning) was dependent on the condition when using the M-FAST and when using the more stringent cut-scores provided for ADFCRI,

indicating that the measures performed differently depending on the condition. However, the determination of feigning was independent of the condition when the lower cut-scores provided for Possible Overreporting were used. In other words, the number of participants identified by the ATP Scales was not dependent on what the participants were feigning (schizophrenia, incompetency or both), or even if they were feigning (control group) when using these lower cut-scores. As will be detailed later, this latter finding was likely due to the ATP Scale elevations across conditions that were found when using the Possible Overreporting cut-scores.

Table 4
Fisher-Freeman-Halton Exact Test Results

Measure/Cut-Score	Cut Score	Value	Exact Sig. 2-Sided
M-FAST Total Score Overall	$\geq$ 6	27.58	<.001
ATP Scales: Possible Overreporting	**	3.99	.167
ATP Scales: Ancillary Data on Feigning Competency Impairment	****	8.92	.015

Note. **The cut-scores recommended for determination of Possible Overreporting are ATP-P >1; ATP-N >0; ATP-I >1; and ATP-B >2. ****The cut-scores recommended for determination of Ancillary Data on Feigning Competency Impairment are ATP-P >4; ATP-N >2; ATP-I >1; and ATP-B >6.

In consideration of the aforementioned concerns regarding the use of parametric analyses, the nonparametric test Kruskal Wallis was used as an alternative to ANOVA. This analysis revealed that the mean ranks of ATP-I raw scores, ATP-B raw scores and the M-FAST Total Scores were significantly different (at the .05 level) between conditions (p<.001, p =.001, p <.001 respectively). These results are depicted in Table 5 below.

Table 5
Kruskal-Wallis Test Results

	Measure/Scale Score		
	M-FAST Total Score	ATP-I Raw Score	ATP-B Raw Score
Kruskal-Wallis H	22.317	20.116	15.453
df	3	3	3
Asymptotic Sig.	<.001	<.001	.001

Given that the Kruskal-Wallis test revealed significant differences in mean ranks of scores between conditions, post-hoc analyses were conducted. Pairwise comparisons (at the .05

level of significance) with significance values adjusted by the Bonferroni correction for multiple tests revealed that the M-FAST Total Scores for the Schizophrenia and Combined conditions were significantly higher than the M-FAST Total scores for the control condition (*p*s=.001), whereas the total scores for the incompetency group did not significantly differ from the control condition (*p*=.895). Regarding the ATP-I Scores, it was found that the scores of all experimental conditions were significantly higher than the control group (incompetency *p*=.034; combined *p*=.006); Schizophrenia *p*=.000). Post-hoc analyses of the ATP-B scores, similar to the M-FAST Total Score, revealed that the ATP-B scores for the Schizophrenia (*p*=.001) and combined (*p*=.033) conditions were significantly higher than the control group, but there were no such significant differences between the ATP-B scores of the incompetency and control conditions (*p*=.629). No other significant differences between conditions were found for any of the aforementioned scores.

Table 6
Post-hoc Pairwise Comparisons

Measure/Cut-Score/Condition	*p* Value (.05 level)
M-FAST Total Score	
Schizophrenia	.001
Incompetency	.895
Combined	.001
ATP-I	
Schizophrenia	.034
Incompetency	.034
Combined	.034
ATP-B	
Schizophrenia	.001
Incompetency	.629
Combined	.033

Note. The pairwise comparisons were conducted using the experimental vs. control group condition scores). A Bonferroni Correction for Multiple Tests was applied (.05 level)

Hypothesis 5

Hypothesis 5 stated: although both measures are expected to accurately classify the majority of participants in the coached mental illness group as potential feigners, it is hypothesized that the ATP Scales will demonstrate overall higher sensitivity, but lower specificity than the M-FAST.

This hypothesis was confirmed. Specific to the coached mental illness group (i.e., Schizophrenia), the ATP Scales demonstrated a sensitivity of 1.0 (n = 10/10) using both cut-scores (Possible Overreporting and Ancillary Data on Feigning Competency-Related Impairment). The M-FAST demonstrated a sensitivity of .90 (n = 9/10) for the Schizophrenia group. Please see Table 7 for an abbreviated list of relevant performance statistics.

The overall higher sensitivity, but lower specificity of the ATP Scales compared to the M-FAST remained true when using both the lower cut-scores for Possible Overreporting and more stringent cut-scores used for Ancillary Data on Feigning Competency-Related Impairment. This finding was, however, particularly applicable to the incompetency condition. Indeed, the M-FAST's average sensitivity across conditions was .69, but was .9 for the Schizophrenia condition, .88 for the combined condition, and only .25 for the incompetency condition. When using the Possible Overreporting cut-scores for the ATP Scales, the sensitivity across conditions was 1.00, and even when using the more stringent cut-scores for ancillary data, the sensitivity of the ATP Scales was 1.0 for Schizophrenia condition, .75 for the incompetency condition, and .88 for the combined condition.

The ATP-Scales' demonstration of higher sensitivity than the M-FAST for the incompetency condition also remained true across individual scales. It should be noted that the ATP-R was not included in the below results given that it is only used to identify possible

defensiveness and is not used to identify potential feigning. Performance statistics for the ATP-R are reported in Table 8 along with all other ATP Scales and the M-FAST. The M-FAST's sensitivity for identifying feigning participants in the incompetency condition ranged from .13 (RC and ES scales) to .5 (RO Scale), whereas the ATP Scales' sensitivity for this group when using the Possible Overreporting cut-scores ranged from .75 (ATP-P and ATP-I) to 1.0 (ATP-N).

The noted differences in sensitivity were somewhat less pronounced for the combined condition with sensitivity of the M-FAST's scales ranging from .50 (UH) to .88 (ES and RC), the ATP Scales using Possible Overreporting cut-scores ranging from .62 (ATP-P) to 1.0 (ATP-N), and the ATP Scales using ADFCRI cut-scores ranging from .63 (ATP-P) to .86 (ATP-I). The M-FAST's sensitivity for the Schizophrenia condition ranged from .5 (RO) to .90 (RC) and the ATP Scales' sensitivity for this condition was 1.0 for all of the primary scales (i.e., excluding ATP-R) when using the Possible Overreporting cut-scores and ranged from .70 (ATP-P) to .90 (ATP-N and ATP-I) when using the higher ADFCRI cut-scores. This again shows a higher sensitivity of the ATP Scales when identifying feigning participants in the Schizophrenia condition.

Finally, the sensitivity, specificity, negative predictive value (NPV), positive predictive value (PPV), and hit rate were calculated by the author for classifications of feigning based on the M-FAST Total Scores, the cut-scores for Possible Overreporting on the ATP Scales and the cut-scores used for Ancillary Data on Feigning Competency-Related Impairment on the ATP Scales. These analyses provided additional information for each of the above hypotheses and were carried out for: the conditions combined, each condition separately, individual scales with combined conditions, and individual scales and their individual conditions. The overall results for the M-FAST Total Score and aforementioned cut-scores on the ATP Scales are displayed in

Table 7 below, in addition to the results for each condition. A more comprehensive list detailing these statistics for each scale and condition can be found in Table 8 following the appendices.

Table 7
Performance Statistics: Abbreviated

Measure/Cut-Score/Condition	Cut Score	Sensitivity	Specificity	NPV	PPV	Hit Rate
M-FAST Total Score Overall	≥ 6	.69	1.0	.62	1.00	.79
Schizophrenia	≥ 6	.9	N/A	N/A	1.0	.9
Incompetency	≥ 6	.25	N/A	N/A	1.0	.25
Combined	≥ 6	.88	N/A	N/A	1.0	.88
Control	≥ 6	N/A	1.0	1.0	N/A	1.0
ATP Scales: PO *	**	1.0	.23	1.0	.72	.74
Schizophrenia	**	1.0	N/A	N/A	1.0	1.0
Incompetency	**	1.0	N/A	N/A	1.0	1.0
Combined	**	1.0	N/A	N/A	1.0	1.0
Control	**	N/A	.23	1.0	N/A	.23
ATP Scales: ADFCRI**	****	.88	.54	.67	.79	.77
Schizophrenia	****	1.0	N/A	N/A	1.0	1.0
Incompetency	****	.75	N/A	N/A	1.0	.75
Combined	****	.88	N/A	N/A	1.0	.88
Control	****	N/A	.54	1.0	1.0	.54

Note. Given that there is no potential for false positives/true negatives in the experimental conditions, hence the PPV will always be 1.0 and there is no potential for an NPV or to determine specificity. The same applies to the Control Condition in which the NPV will always be 1.0 and there is no opportunity to calculate the PPV and Sensitivity. *This refers to overall data for the ATP Scales using the cut-scores used to determine a Possible Overreporting (PO) Response Style **The cut-scores recommended for determination of PO are ATP-P >1; ATP-N >0; ATP-I >1; and ATP-B >2. ***This refers to overall data for the ATP Scales using the cut-scores used for Ancillary Data on Feigning Competency- Related Impairment Response Style ****The cut-scores recommended for determination of ADFCRI are ATP-P >4; ATP-N >2; ATP-I >1; and ATP-B >6.

CHAPTER 5

DISCUSSION

Overview of Findings

These findings, although preliminary given the small sample size, suggest that when used with participants coached to feign Schizophrenia, incompetency to stand trial, or both, the ATP Scales demonstrate a high sensitivity across all conditions. Given that the goal of screening measures is to identify potential feigning, this data suggests that the ATP Scales are effective in this purpose. The overall utility of the measures was, however, dampened by the low specificity when using the recommended Possible Overreporting cut scores. Indeed, the ATP Scales identified 92% of participants (36/39) as potentially feigning, including 76.9% (10/13) of the control group. As previously described, analyses revealed that a determination of feigning was independent of the assigned condition, including the control condition, using the Possible Overreporting cut-scores. Given that less than a quarter of participants were screened out (i.e., not identified as potentially feigning) by the ATP Scales, the vast majority of participants would have required further evaluation, and unnecessarily so for the 10 identified control condition participants.

The current study revealed an overall higher sensitivity (1.0) and lower specificity (.23) of the ATP Scales than that found in the literature review, particularly compared to studies that utilized forensic samples in which the sensitivity ranged from .90 (Rogers, Jackson, et al., 2004) to .94 (Rogers Tillbook & Sewell, 2004) and the specificity ranged from .52-.78 (Vitacco et al., 2007). Results of the current study were somewhat more comparable to other studies that also used undergraduate participants, although the sensitivity remained higher and the specificity lower. For example, Springman and Vandenberg found a sensitivity of .97 and specificity of .55.

Norton and Ryba (2008) found that the ATP Scales identified 42/50 participants as feigning, when 22 of the 42 were actually feigning, while the current study identified 36/39 participants as feigning when only 26/39 were. It is unclear if the particularly high sensitivity and low specificity of the current study is a replicable finding or if it is related to other factors such as the instructions used or participants deviating from the instructions and not responding honestly on the manipulation check (e.g., ranking themselves as having followed the instructions when they did not). It is further possible that the incentive that was intended to motivate participants to perform well may have also motivated them to indicate on the manipulation check that they followed instructions regardless of their actual performance. It should be noted, however, that the M-FAST did not identify any participants in the control condition as possibly feigning, demonstrating a higher specificity than what was generally found in the literature review, and both measures were administered to the same participants in a counterbalanced fashion. The effects of counterbalancing could not, however, be formally assessed as order of administration was not specifically tracked for each researcher.

As briefly mentioned, it is possible that the findings of the current study are directly related to the use of an undergraduate sample which sample may not yield results on the ATP Scales that are generalizable to forensic samples. Although there could be a number of reasons for the lack of generalizability, one possibility is that likely fewer undergraduate participants have experience in the courtroom than do genuine forensic samples and so may have less accurate ideas about what their experiences in the courtroom would actually be like. This is important given that each of the items on the ATP Scales asks about symptoms and competency impairment relevant to courtroom experience. For example, some undergraduates may have a tendency to believe that they would have certain extreme or unusual experiences in the

courtroom that the ATP Scales screen for (e.g., memory impairment), which could cause them to have elevations particularly on the ATP-N scale. Indeed, in the current study and in Norton and Ryba's (2008) findings, the ATP-N scale identified the highest percentage of honest responders out of all of the ATP Scales. Excluding the ATP-N Scale from analyses, the other ATP Scales combined identified as feigning: 8 of the 13 (61.5%) control condition participants, 6 of 8 (75%) participants in the incompetency condition, 10 out of 10 (100%) participants in the schizophrenia condition, and 7 of 8 (87.5%) participants in the combined condition. This recued the overall sensitivity of the ATP Scales using the Possible Overreporting cut-scores to .88 (versus 1.0) and increased the specificity to .38 (versus .23).

Another important factor for consideration in the interpretation of the current study results is that in known-groups studies, the actual motivation for feigning is unknown. Indeed, it is possible that some participants in known-groups CST studies are feigning for other reasons than to be found incompetent (i.e., feigning incompetency) such as to obtain medication or other perceived incentives. In studies in which participants are coached, the motivation is known. In the current study, all participants in experimental groups were provided with the following statement in their instructions, "you've heard that you may be able to avoid punishment by pretending that you…." It is thus possible that all participants were motivated to be found incompetent and may have been feigning incompetency to some degree. This is important given that the ATP Scales focus on symptoms in the context of the courtroom and screen for feigning of incompetency. This may have contributed to the particularly high sensitivity and low specificity found in the current study and partially explain why such findings were not also found for the M-FAST, which does not include a similar focus on courtroom experiences or competency impairment. This of course does not account for the low specificity across the

control condition, which may be better explained by the aforementioned concerns regarding the use of undergraduate participants.

When compared specifically to the M-FAST, the ATP Scales again demonstrated an overall higher sensitivity, but lower specificity. This remained true when using both the lower cut-scores for Possible Overreporting and more stringent cut-scores used for Ancillary Data on Feigning Competency-Related Impairment. This finding was, however, particularly applicable to the incompetency condition. Indeed, the M-FAST's average sensitivity across conditions was .69, but was .9 for the Schizophrenia condition, .88 for the combined condition, and only .25 for the incompetency condition. When using the Possible Overreporting cut-scores for the ATP Scales, the sensitivity across conditions was 1.00, and even when using the more stringent cut-scores for ancillary data, the sensitivity of the ATP Scales was 1.0 for Schizophrenia condition, .75 for the incompetency condition, and .88 for the control condition. The ATP-Scales' demonstration of higher sensitivity than the M-FAST for the incompetency condition remained true across individual scales. Indeed, regarding comparison of specific ATP Scales to the M-FAST, the ATP-I scale scores were significantly higher for the incompetency group compared to the control group (p=.034); however, no such significant differences were found between the M-FAST total scores (p=.895). These results are likely attributable to the fact that whereas the items on the M-FAST focus on feigned psychiatric symptoms which are not specific to the courtroom setting, all questions on the ATP Scales pertaining to symptoms are phrased in the context of experiences in the courtroom. Further, the ATP-I specifically asks about competency impairment, whereas there is no such screen in the M-FAST. Given that the incorporation of screening for feigning incompetency is one of the main features that sets the ATP Scales apart from other screening measures such as the M-FAST, the current study's demonstration of higher

score elevations and higher sensitivity of the ATP-I scales in response to individuals feigning competency impairment, potentially lends additional support to the possible utility of the ATP Scales, specifically the ATP-I scale, when identifying participants feigning incompetency to stand trial.

Regarding comparison of the performance of the individual ATP Scales, the ATP-I showed equivalent sensitivity (.75) as the ATP-B and ATP-P Scales with identifying participants in the feigning incompetency condition when using the Possible Overreporting cut-scores. The ATP-I Scores for the incompetency condition, however, demonstrated statistically significant differences from the ATP-I scores of the control condition (p=.034), unlike the ATP-B scale scores (p=.629). This statistically significant higher score elevations of the ATP-I Scales suggest that the ATP-I may be more sensitive to feigning of incompetency than the ATP-B, but this difference is not notable when utilizing the low cut-scores set for screening purposes. Even when using the more stringent cut-scores for Ancillary Data on Feigning Competency-Related Impairment, the sensitivity of the ATP-I and ATP-B scales remained at .75, whereas the sensitivity of the ATP-P scale reduced to .38.

Regarding the combined condition, the ATP-I Scale showed increased sensitivity as compared to the ATP-P Scale (.88 vs .63) and equivalent sensitivity to the ATP-B (.88). Using the cuts scores for Ancillary Data on Feigning Competency-Related Impairment, the ATP-I demonstrated the highest sensitivity (.86) compared to the other ATP Scales (ATP-P= .63; ATP-N= .75; ATP-B=.75). These results could suggest an increased utility of the ATP-I when identifying participants with a hybrid response style when the sensitivity and specificity are balanced, although this does not generalize to the recommended Possible Overreporting cut-scores. It is, however, unclear if the ATP-I scales demonstrated a genuine increased sensitivity

for such combined presentation than did the other scales, or if this was at least partially related to factors such as participants also endorsing symptoms classified as affective symptoms or psychotic symptoms and/or endorsing more competency impairment than other symptoms.

An interesting and unexpected finding was that the sensitivity of the ATP-N scales was 1.0 when identifying feigners across all conditions when using the Possible Overreporting cut-scores. It is unclear if this is indicative of the scale itself, if participants were feigning affective symptoms purposefully or inadvertently despite instructions, or some combination of the two. Further, as previously mentioned, Norton and Ryba (2008) also used undergraduate participants and found that the ATP-N scale identified the highest percentage of honest responders, similar to the findings in the current study. Part of the increased sensitivity of the ATP-N Scale may also be attributable to the content of the ATP-N scales and nature of the undergraduate sample. As previously detailed, all questions on the ATP Scales are phrased as pertaining to courtroom experience, and given that undergraduates likely have less experience with being a defendant in the courtroom as compared to genuine forensic samples, this may bias their responses in such a way that causes them to overestimate the affective and other symptoms that they would experience in the courtroom.

As formerly noted, the higher sensitivity of the ATP Scales did come at the cost of lower specificity. Specifically, whereas the M-FAST demonstrated an overall specificity of 1.0, allowing confidence that test results will be negative when a person was not feigning, the specificity of the ATP Scales was only .23 when using the lower cut-scores for Possible Overreporting and .54 when using the more stringent cut-score for ancillary data. Thus, the current results indicate that the vast majority of participants would be identified by the ATP Scales as feigning, regardless of whether or not they were.

Overall, the data of the current study is primarily consistent with prior literature suggesting that the ATP Scales are effective at identifying feigners, even when they are coached. The current study demonstrated such efficacy with participants who were feigning Schizophrenia, incompetency to stand trial, and both (combined presentation). These findings held particularly true when using the lower cut-scores for identification of possible overreporting of symptoms. The high sensitivity and particularly low specificity of the ATP Scales when using these cut-scores, however, was such that the clinical utility of the measure was questionable. Indeed, almost all participants were identified as feigning, including the majority of the control group. The ATP Scales revealed no score elevations for only three of the 39 participants, 13 of whom were honest responders, meaning that, had this been an applied clinical setting, 36 of 39 participants would have required follow-up evaluation of malingering. The 3 participants who did not have ATP Scale elevations would have been accurately ruled out from further malingering assessment, and although this would be somewhat valuable in an applied setting (e.g., saving time and cost), far more value would obviously be derived if even more of the honest responders had been ruled out (i.e., if the specificity was higher). As previously noted, the primary purpose of screening measures is not to make diagnostically accurate determinations, but rather to indicate whether or not there is a need for further testing and hence, sensitivity should be emphasized over specificity, yet, specificity should not be so low as to require almost all examinees to undergo further evaluation.

The higher cut-scores used for Ancillary Data on Feigning Competency-Related Impairment provided more of a balance between overall sensitivity (.88) and specificity (.54), as compared to the Possible Overreporting cut-scores and yielded a slightly higher overall hit rate, or accuracy, (.77 vs. .74). When using the lower cut-scores for Possible Overreporting, however,

the ATP Scales demonstrated a Negative Predictive Value (NPV) of 1.0, versus the NPV of .67 found for the ancillary data cut-scores. This suggests that examiners using the recommended Possible Overreporting cut-scores can be confident that if an examinee's score is not elevated than the examinee really is not feigning.

Regarding specific ATP-scales, data suggested that the ATP-I scale may have increased utility over the other ATP Scales when identifying competency impairment, which was demonstrated primarily for the combined group and when using the more stringent cut-scores Ancillary Data on Feigning Competency-Related Impairment. This potential increased sensitivity for identifying feigned competency impairment may not, however, consistently lead to significant differences in outcomes when compared to other scales when using low cut-scores that emphasize overall high sensitivity. The only potential exception to this was the increased sensitivity of the ATP-I compared to the ATP-P for the combined group, even when using the lower Possible Overreporting cut-scores. The ATP-I also demonstrated an average higher hit rate, or accuracy, across conditions using both sets of cut-scores for the ATP-Scales. This is likely at least partially related to the scale's greater accuracy when applied to the control condition (i.e., lack of elevation for participants in the control condition) compared to all other scales and conditions using both sets of cut-scores, aside from the ATP-P which when using the ADFCRI cut-scores demonstrated an accuracy of 1.0 (i.e., did not identify any control condition participants as potentially feigning). The ATP-I also demonstrated significantly higher scores for the incompetency condition compared to the control condition, unlike the M-FAST total Score and ATP-B scale. As previously detailed, this suggests that the ATP-I scale may be more sensitive to feigned competency impairment, although this increased utility is not notable when cut-scores are low.

The data from the current study further indicates that the ATP Scales may be more likely than the M-FAST to identify malingers as potentially feigning, or in other words "catch" more malingerers than the M-FAST, particularly when feigning competency impairment, but again will be more likely to falsely identify honest responders as potentially feigning.

Limitations

The current study utilized undergraduate participants rather than genuine CST examinees to allow for participants to be coached on how to feign impairments; however, this decreased the generalizability and hence external validity of the current study. Given the high number of control-condition participants identified by the ATP Scales as feigning, it was questioned whether the participants genuinely followed instructions despite indications on the manipulation check of having done so. The M-FAST did not, however, identify any of the participants as feigning. As previously detailed, this may be related to the fact that the ATP Scales phrase all items in terms of experiences in the courtroom, and undergraduates as used in the current study likely do not have as much experience being defendants in the courtroom as genuine forensic populations due. This may have led the honest responders to overestimate what symptoms or reactions they may experience in a courtroom setting, and thus reduced the generalizability of results. Although this limitation requires further exploration, it is consistent with prior research using undergraduate participants which shows a slightly higher sensitivity and lower specificity (Springman and Vandeberg, 2009) and a higher identification of control condition participants (Norton & Ryba, 2008) than what is generally seen in the literature.

Also regarding potential performance issues impacting the current results, it should be noted that the M-FAST overall demonstrated a higher specificity (1.0) , but lower sensitivity (.65) than what was generally seen in the literature review (specificity =.83 [Miller, 2004] to .90

[Vitacco et al., 2007), regardless of whether comparing to literature using undergraduate participants (sensitivity= .88; Guy, Kwartner & Miller, 2006) or a forensic sample (1.00; Vitacco et al., 2007). When excluding the incompetency condition, the sensitivity of the M-FAST (.89) was more comparable to previous findings, although the specificity remained higher. Given that both of the measures (ATP Scales and M-FAST) were administered to the same participants in a counter-balanced fashion, if there were effects related to the performance of the participants in the control condition, these effects would have not only differentially impacted the measures, but impacted the measures in opposite ways (i.e., increased the specificity of the M-FAST but decreased the specificity of the ATP Scales), which is unlikely.

The current study originally intended to explore the performance of the ATP Scales with mania and depression, in addition to Schizophrenia, but this was not possible given resource limitations in terms of the number of available experimenters, sample size, and funding for materials. Hence, the results of this study may not apply to diagnoses other than psychosis, such as affective disorders. The sample size of this study was small, reducing statistical power, which increases the risk of a type II error, while also likely reducing the replicability. Studies with low sample sizes such as this one are also limited in terms of statistical analyses and effect sizes can be falsely inflated, increasing the risk of a Type I error. Specific to the data in the current study, analyses were limited to non-parametric tests, given the violation of the assumption of normality and homogeneity of variance which further reduced power. The data analyzed consisted of 25 females and 14 males, and although Fishers Exact Tests did not reveal any statistically significant differences between gender and feigning classification on the M-FAST or ATP-Scales, further exploration of the influence of gender is warranted, particularly given the small

sample size. Given these limitations, the results of the study should be considered exploratory in nature.

Implications and Future Directions

The results of this study suggest that the ATP Scales may demonstrate a particular usefulness for defendants feigning incompetency to stand trial as compared to the M-FAST, particularly when they are feigning only incompetency. Indeed, the M-FAST demonstrated low sensitivity (.25) when identifying potential feigners in the incompetency group, compared to the ATP Scales (1.0). The clinical utility of this finding is arguable given that current data suggests that competency to stand trial examinees often rely on more than one strategy to feign impairment (e.g., feigning psychiatric symptoms, lack of legal knowledge, and/or memory impairment) and when already using one strategy to appear impaired, there is a significantly increased risk that examinees will engage in another strategy (Gottfried, Vitacco, & Steadham, 2017; Gottfried & Glassmire, 2015; Vitacco et al., 2009). Hence, the likelihood that an examinee would *only* be feigning competency impairment may be low and the M-FAST demonstrated considerably higher sensitivity (.88) with the combined group (i.e., participants feigning both Schizophrenia and incompetency to stand trial and thus using more than one strategy), although still not as high as the ATP Scales (1.0). Response styles in CST evaluations and the utility of measures such as the M-FAST and ATP Scales with such response styles should continue to be explored. If additional data were to show that some examinees do feign only competency impairment, the current study would then support a particular and unique usefulness of the ATP Scales.

It should be noted that the potential particular utility of the ATP Scales when identifying participants feigning only competency impairment appeared at least partly related to the

measure's very high sensitivity and low specificity across conditions when using the recommended cut-scores for Possible Overreporting. Indeed, the majority of participants in the control condition were also identified as possibly feigning (10/13). This potential increased usefulness over the M-FAST remained true, however, when using the more stringent cut-scores recommended for Ancillary Data on Feigning Competency-Related Impairment, suggesting there may be some genuine advantage inherent to the ATP Scales. These higher cut-scores demonstrated a better balance between sensitivity and specificity in the current study, although they are not intended to be used as initial screening cut-scores. Rather, they are to be used only after malingering has been established and then can provide information as to whether the malingering involves feigning of competency impairment. Future studies may wish to continue exploration of the utility of these higher cut-scores with various response styles.

In the current study, the ATP-I Scale demonstrated an overall higher accuracy/hit rate than the majority of other ATP scales across conditions and when using both sets of cut-scores. Although the sensitivity, which is emphasized in screening measures, was not *consistently* higher than the other ATP Scales across conditions and cut-scores, the utility of the ATP-I for potentially being a more accurate scale for identification of possible malingering of incompetency warrants further evaluation. It was also the only scale to demonstrate statistically significant higher scores for the incompetency group as compared to the control group, unlike the M-FAST Total score and the ATP-B scores.

Although the findings of the current study suggest that using the recommended Possible Overreporting cut-scores would allow evaluators confidence that the vast majority of malingerers will be identified, evaluators must be mindful of the intended purpose of the ATP Scales as a screening rather than diagnostic measure given that the specificity is low. It should be noted that

the specificity observed in the current study was lower than what has been identified in other studies as described above. Should the findings of the current study be replicated, however, this could reduce the measure's practical clinical utility given that the vast majority of examinees would be identified as needing additional assessment of potential malingering regardless of whether or not they are, in fact, malingering. Evaluators could be confident, however, that the majority (in this study, all) potential feigners would be identified as potentially feigning and that those *not* identified as feigning would be honest responders (NPP= 1.0 in current study).

Future similar research is warranted with utilization of a larger sample size, including a greater age range and preferably drawn from a forensic sample. As noted, there may be unique aspects of the ATP Scales and undergraduate participants that reduce the generalizability of study results when using undergraduate participants. This study initially sought to incorporate feigning conditions for affective disorders including Major Depressive Disorder and mania, although this was limited by the available sample size and resources. Future research should explore the utility of these measures with affective symptoms in addition to psychosis. The potential implications of gender as well as other demographic variables such as ethnicity may also warrant additional exploration. Future research could also be conducted comparing the utility of other feigning assessment instruments commonly used in CST evaluations, such as the Inventory of Legal Knowledge (Musick & Otto, 2010), with the ATP Scales' ability to identify participants feigning competency impairment and potential feigned incompetency to stand trial.

References

Abrams, A. A. (2002). Assessing competency in criminal proceedings. In B. Van Dorsten (Ed.), *Forensic psychology from classroom to court-room* (pp. 105–141). New York: Kluwer Academic.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.

American Psychological Association. (2010). *American Psychological Association ethical principles of psychologists and code of conduct*. Retrieved from http://www.apa.org/ethics/code/.

Blackstone, W. (1783). Commentaries on the laws of England (9th ed.). London: W.

Boccaccini, M. T., Murrie, D. C., & Duncan, S. A. (2006). Screening for malingering in a criminal-forensic sample with the Personality Assessment Inventory. *Psychological Assessment, 18*, 415-423.

Butcher, J. N., Graham, J. R., Ben-Porath, Y. S., Tellegen, A., Dahlstrom, W. G., & Kaemmer, B. (2001). *MMPI-2: Manual for administration and scoring.* (Rev. ed.). Minneapolis: University of Minnesota Press.

Carr, C. & Mary, K. (2015). The assessment of malingering within forensic populations. *Loma Linda University Electronic Theses & Dissertations*. Paper 227.

Competency to stand trial. (n.d.). Retrieved from http://www.nolo.com/legal-encyclopedia/competency-stand-trial.html.

Competency to stand trial evaluations. (n.d.). Retrieved from http://psycholegalassessments.com/areas-of-expertise/competency-to-stand-trial/.

Cornell, D. G., & Hawk, G. L. (1989). Clinical presentation of malingerers diagnosed by experienced forensic psychologists. *Law and Human Behavior*, *13,* 374–383.

Drogin E. Y., Dattilio F. M., Sadoff R. L., Gutheil T. G. (2011). *Handbook of Forensic Assessment: Psychological and Psychiatric Perspectives*. Hoboken, NJ: John Wiley & Sons.Cooper v. Oklahoma, 116 S. Ct. 1373 (1996).

Drope v. Missouri, 420 U.S. 162 (1975) 20.

Dusky v. United States, 362 U.S. 403 (1960).

Eizenstat, S.E. (1968). Mental competency to stand trial. *Harvard Civil Rights-Civil Liberties Law Review*, *4*, 379-413.

Everington, C. & Luckasson, R. (1992). *Competence Assessment for Standing Trial for Defendants with Mental Retardation: Test Manual.* Worthington, OH: IDS Publishing Corp.

Farkas, G., DeLeon, P. & Newman, R. (1997). Sanity examiner certification: An evolving agenda. *Professional Psychology: Research and Practice*, *28*, 73-76.

FL. R. Crim. Pro. § 2.311 (a).

Glancy, G. D., Ash, P., Bath, E. P. J., Buchanan, A., Fedoroff, P., Frierson, R. L., … Zonana, H. V. (2015b). AAPL Practice Guideline for the Forensic Assessment. *Journal of the American Academy of Psychiatry and the Law Online* , *43*(2 Supplement), S3–S53. JOUR. Retrieved from http://www.jaapl.org/content/43/2_Supplement/S3.short.

Godinez v. Moran, 509 U.S. 389 (1993).

Gothard, S., Rogers, R., & Sewell, K. W. (1995). Feigning incompetency to stand trial: An investigation of the GCCT. *Law and Human Behavior, 19,* 363–373.

Gottfried, E., & Glassmire, D. (2015). The relationship between psychiatric and cognitive feigning among forensic inpa- tients adjudicated incompetent to stand trial. *Assessment.* doi: 10.1177/107319115599640

Gottfried, E. D., Vitacco, M. J., & Steadham, J. A. (2017). The Relationship between Feigned Psychiatric Symptoms and Feigned Lack of Legal Knowledge among a Multi-Site Sample of Forensic Inpatients. *International Journal of Forensic Mental Health*, 1-10. DOI: 10.1080/14999013.2017.1288667.

Grisso, T. (2005). *Evaluating juveniles' adjudicative competence: A guide for clinical practice.* Sarasota, FL: Professional Resource Press.

Group for the Advancement of Psychiatry. (1974). *Misuses of psychiatry in the criminal courts: Competency to Stand Trial.* New York: Mental Health Materials Center.

Guy, L. S., Kwartner, P. P., & Miller, H. A. (2006). Investigating the M-FAST: Psychometric properties and utility to detect diagnostic specific malingering. *Behavioral Sciences and the Law*, *24*(5), 687–702. http://doi.org/10.1002/bsl.706.

Heilbrun, K. (2001). *Principles of forensic mental health assessment.* New York: Kluwer Academic/Plenum Publishers.

Hoge, S. K., Bonnie, R. J., Poythress, N., & Monahan, J. (1992). Attorney-Client Decision-Making in Criminal Cases: Client Competence and Participation as Perceived by their Attorneys. *Behavioral Sciences & the Law*, *10*(3), 385–394. JOUR. Retrieved from http://navigator-iup.passhe.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=i3h&AN=12115260&site=eds-live.

Hoge, S. K., Bonnie, R. J., Poythress, N., & Monahan, J. (1999). *The MacArthur Competence Assessment Tool—Criminal Adjudication*. Odessa, FL: Psychological Assessment Resources.

Hower, C. (2015). How to distinguish between malingering, genuine psychosis. http://www.healio.com/psychiatry/practice-management/news/online/%7B0288f24f-1145-4a91-86e9-06bbc38ab10b%7D/how-to-distinguish-between-malingering-genuine-psychosis.

Indiana v. Edwards, 554, U.S. (2008).

Jackson, R. L., Rogers, R., & Sewell, K. W. (2005). Forensic applications of the Miller Forensic Assessment of Symptoms Test (M-FAST): Screening for feigned disorders in competency to stand trial evaluations. *Law and Human Behavior*, 29, 199–210. http://doi.org/10.1007/s10979-005-2193-5.

Jenkins v. United States, 307 F. 2d. 637 (1962).

Johnson, W. G., & Mullett, N. (1987). Georgia Court Competency Test–R. In M. Hersen & A. Bellack (Eds.), *Dictionary of behavioral assessment techniques*. New York: Pergamon Press.

Kruh, I. & Grisso, T. (2009). *Evaluation of juvenile's competence to stand trial*. New York: Oxford University Press.

Lees-Haley, P. R. (1997). Attorneys Influence Expert Evidence in Forensic Psychological and Neuropsychological Cases. *Assessment, 4*(4), 321–324 http://doi.org/10.1177/107319119700400402.

Melton, G., Petrila,, J., Poythress, N., & Slobogin, with C., Lyons, P., & Otto, R. K. (2007). *Psychological evaluations for the courts: A handbook for mental health professionals and lawyers (third edition).* New York: Guilford.

Mental Competency Assessment and Training, Community-Based Program (MCAT). (n.d.) Retrieved from http://www.psychwest.com/forensiccomp.html on October 1, 2016.

Musick, J. & Otto, R. (2010). *The Inventory of Legal Knowledge*. Lutz, FL: Psychological Assessment Resources.

Juvenile and Adult Training for Competency to Stand Trial. (n.d.) Retrieved from http://www.psychwest.com/forensiccomp.html.

Miller, H. A. (2001). *M-FAST: Miller-Forensic Assessment of Symptoms Test professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.

Miller, H.A. (2005). The Miller-Forensic Assessment of Symptoms Test (M-Fast) Test generalizability and utility across race literacy, and clinical opinion. *Criminal Justice and Behavior* 32(6), 591-611.

Miller, H.A. (2013). The Assessment of malingering with the M-FAST [PowerPoint Slides]. Retrieved from PAR Online Web site: http://www4.parinc.com/Products/Product.aspx?ProductID=MFAST.

Milton R. Dusky, Appellant, v. United States of America, Appellee, 271 F.2d 385 (8th Cir. 1959).

Mossman, D., Noffsinger, S. G., Ash, P., Frierson, R. L., Gerbasi, J., Hackett, M., … Zonana, H. V. (2007). AAPL practice guideline for the forensic psychiatric evaluation of competence to stand trial. *Journal of the American Academy of Psychiatry and the Law*, *35*(4 SUPPL.), S3–S22. Retrieved from: http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L351063370.

Norton, K. A., & Ryba, N. L. (2010). An investigation of the ECST-R as a measure of competence and feigning. *Journal of Forensic Psychology Practice*, *10*(March 2008), 91–106. http://doi.org/10.1080/15228930903446625.

Owens, H. Rosner, R., & Harmon, R.(1987). The Judge's View of Competency Evaluations II. *The Bulletin of the American Academy of Psychiatry and the Law*, *15*(4), 381-389.

Pate v. Robin-son, 383 U.S. 375 (1966).

Poythress, N., Bonnie, R., Monahan, J., Otto, R., & Hoge, S. (2002). Adjudicative Competence: The MacArthur StudiesPerspectives in Law and Psychology, Vol. 15 NY: Kluwer Press.

Resnick, P. & Knoll, J. (2005). Faking it: How to detect malingered psychosis. *Current Psychiatry*, *4*(11), 12-25. Retrieved from http://www.mdedge.com/currentpsychiatry/article/61060/schizophrenia-other-psychotic-disorders/faking-it-how-detect.

Rogers, R. (2008a). An introduction to response styles. In R. Rogers (Ed.), *Clinical assessment of malingering and deception* (3rd ed., pp. 3–13). New York, NY: Guilford Press.

Rogers, R., Bagby, R.M., & Dickens, S.E. (1992). *Structured Interview of Reported Symptoms: Professional manual*. Odessa, FL: Psychological Assessment Resources.

Rogers, R. & Bender, S. (2003). Evaluation of Malingering and Deception. In Goldstein, A. & Weiner, B. (Eds.) *Handbook of Psychology (Volume 11): Forensic Psychology* (2nd ed., pp 109-129). Hoboken, NJ: John Wiley & Sons, Inc.

Rogers, R., Grandjean, N. R., Tillbrook, C. E., Vitacco, M. J., & Sewell, K. W. (2001). Recent interview-based measures of competency to stand trial: A critical review augmented by research data. *Behavioral Sciences and the Law*, 19, 503-518.

Rogers, R., Jackson, R. L., Sewell, K. W., & Harrison, K. S. (2004). An examination of the ECST-R as a screen for feigned incompetency to stand trial. *Psychological Assessment, 16*(2), 139–145. http://doi.org/10.1037/1040-3590.16.2.139.

Rogers, R., & Johansson-Love, J. (2009). Evaluating competency to stand trial with evidence-based practice. *The Journal of the American Academy of Psychiatry and the Law, 37*(4), 450–460. http://doi.org/37/4/450.

Rogers, R., Sewell, K. W., Grandjean, N. R., & Vitacco, M. (2002). The detection of feigned mental disorders on specific competency measures. *Psychological Assessment, 14*(2), 177–183. JOUR. http://doi.org/10.1037/1040-3590.14.2.177.

Rogers, R., Tillbrook, C. E., & Sewell, K.W. (2004). *Evaluation of Competency to Stand Trial-Revised (ECST-R) and professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.

Ruiz, M. A., Drake, E. B., Glass, A., Marcotte, D., & van Gorp, W. G. (2002). Trying to beat the system: Misuse of the Internet to assist in avoiding the detection of psychological symptom dissimulation. *Professional Psychology: Research and Practice, 33*(3), 294–299. http://doi.org/10.1037/0735-7028.33.3.294.

Springman, R. E., & Vandenberg, B. R. (2009). The Effects of Test-Strategy Coaching on Measures of Competency to Stand Trial. *Journal of Forensic Psychology Practice*, *9*(3), 179–198. JOUR. Retrieved from http://10.1080/15228930902809856.

Spitzer, R. L., & Endicott, J. (1978). *Schedule of Affective Disorders and Schizophrenia—Change Version*. New York: Biometrics Research.

Tombaugh, T. N. (1996). *Test of Memory Malingering*. North Tonawanda, NY: Multi-Health Systems.

Vitacco, M. J., Rogers, R., & Gabel, J. (2009). An Investigation of the ECST-R in Male Pretrial Patients: Evaluating the Effects of Feigning on Competency Evaluations. *Assessment*, *16*(3), 249–257. http://doi.org/10.1177/1073191108325057.

Vitacco, M. J., Rogers, R., Gabel, J., & Munizza, J. (2007). An Evaluation of Malingering Screens with Competency to Stand Trial Patients: A KnownGroups Comparison. *Law and Human Behavior*, *31*, 249260. http://doi.org/10.1007/s1097900690628.

Wechsler, D. (1999). *Wechsler Abbreviated Scale of Intelligence*. San Antonio, TX: Psychological Corporation.

Winick, B. J. (1995). Reforming incompetency to stand trial and plead guilty: A restated trial proposal and response to professor Bonnie. *Journal of Criminal Law and Criminology*, *85*(3), 571–624.

Yates, D., Moore, Moore, D., McCabe, G. (1999). *The Practice of Statistics (1st Ed.)*. New York: W.H. Freeman.

Zapf, P. A., Hubbard, K. L., Cooper, V. G., Wheeles, M. C., & Ronan, K. A. (2004). Have the Courts Abdicated Their Responsibility for Determination of Competency to Stand Trial to Clinicians? *Journal of Forensic Psychology Practice*, *4*(1), 27–44. http://dx.doi.org/10.1300/J158v04n01_02

Zapf, P. A., & Roesch, R. (2009). *Best practices in forensic mental health assessment: Evaluation of competence to stand trial*. New York, NY: Oxford.

Appendix A

Feigning Schizophrenia Instructions

- You will have approximately 15 minutes to read the below instructions and prepare.
- You will not be able to ask the experimenter any questions about the instructions. If you do not know a word or understand something and it is about a particular symptom, do not use that particular symptom (use the others you understand). Otherwise, do your best.
- You should ***not*** tell the experimenter anything about the instructions you have been provided
- Please follow the instructions carefully. Use ***only*** the information provided (i.e. do not look up information on your cell phone or use your own knowledge about any of the topics, etc).

What happened:
You were recently at a house party near campus and had been drinking alcohol. Another individual at the party started an argument with you which lead to a physical fight. During the fight, you hit the other person over the head with the glass you were holding. Unfortunately, the other person was knocked unconscious and suffered a head injury and is pressing charges. You are being charged with Aggravated Assault which is a is a second-degree felony in Pennsylvania. If you are found guilty, you could be sentenced to ten years in prison, be expelled from IUP, and have to pay thousands of dollars in legal and restitution fees. However, you've heard that you may be able to avoid punishment by pretending that you have the mental illness Schizophrenia.

Instructions:

- You are about to undergo an evaluation as part of the pre-trial proceedings.
- Pretend that you have Schizophrenia using ***only*** the information provided.
- Do ***not*** pretend to have any illness other than Schizophrenia.
- You may refer to your instructions during the evaluation if needed, but do ***not*** remove them from the folder or allow the examiner to see your materials
- If you can **successfully** fool the evaluator into believing that you have Schizophrenia, you will be **entered into a drawing to have a chance to win 1 of 3 Visa gift cards in the amount of $100, $50, or $25.**
- If you are caught faking by the examiner or do not try to follow the instructions, you will ***not*** be entered into the drawing.

- Beware, the evaluator may ask questions to see if you are faking.

Symptoms of Schizophrenia:

- People with Schizophrenia have ***at least one*** of the following symptoms:
    - Delusions: False beliefs that are firmly held onto despite obvious evidence that the belief is false.
        - These beliefs can come in a variety of forms such as believing that others are out to get you, others can hear your thoughts, or thoughts are being inserted into your mind.
    - Hallucinations: Perceptions that seems real, but are not based on any actual stimulus.
        - Hallucinations can impact all five of the senses (i.e. people with Schizophrenia may see, hear, taste, feel, or smell things that aren't there).
    - Disorganized Speech: disorganized speech is a broad term for a number of different abnormalities in speech that may occur. This may include a person saying seemingly random words instead of understandable sentences or frequently switching topics of conversation to very loosely related topics
- Other potential Symptoms:
    - Disorganized or catatonic behaviors: random or bizarre body movements and behaviors or no movement at all
    - Negative symptoms: may include lack of facial or other expression of emotions (e.g., monotone speech or speech without any change in voice) and/or no motivation or interest in activity
- People with Schizophrenia have a total of ***at least two of the above symptoms*** (including at least 1 of the first 3 symptoms) and symptoms have to last for at least 6 months

- People with Schizophrenia have ***at least two of the above symptoms*** (including at least 1 of the first 3 symptoms) and symptoms have to last for at least 6 months

- Symptoms are severe enough to cause problems for the person (e.g., work, school, social relationships, etc.)

Helpful tips for faking:

- The examiner may watch to see if your behavior matches your reported symptoms (e.g., people that hear voices will at times seem distracted).

- People who experience hallucinations (hear or see things that aren't real) typically also experience delusions (firmly believe things that clearly aren't true).

- People who hear voices commonly hear negative things about themselves (e.g, "you're not good at anything") and may hear voices telling them to do things.

- When seeing things, the hallucinations may not always be very detailed (e.g., a hallucination of a person may look more like a shadow)

- Less than half of people with Schizophrenia see things; however, when they do the images are typically of seemingly normal things (e.g., other people) and are typically in color.

- People with Schizophrenia often are not overly willing or happy to discuss their symptoms and do not typically realize that their symptoms are odd in any way (they believe what they are experiencing is real and even normal).

- Symptoms do not suddenly start; typically, they slowly begin over a period of time and increase in amount and how bad they are.

- If the examiner asks if you experience a symptom which seems overly odd, do not say that you experience it. People who are faking often report overly odd symptoms (e.g., seeing aliens).

- Do not say that you experience every symptom that the examiner asks about; reporting too many symptoms is a common mistake of people who are faking.

- Be specific if asked about symptoms (e.g., what you hear, see, or believe) and don't respond with "I don't know" frequently.

- Having Schizophrenia does not mean that a person has an intellectual disability. People who are faking may confuse mental illness with intellectual disability (formerly known as mental retardation).

Appendix B

Feigning Incompetency to Stand Trial Instructions

- You will have approximately 15 minutes to read the below instructions and prepare. You may refer to these instructions only if needed during the experiment; however, the instructions must remain in the folder and out of view of the examiner (ex: keep the instructions on your lap below the table).

- You will not be able to ask the experimenter any questions about the instructions. If you do not know a word or understand something and it is about a particular symptom, do not use that particular symptom (use the others you understand). Otherwise, do your best.

- You should ***not*** tell the experimenter anything about the instructions you've been provided or let the experimenter see your instructions.

- Please follow the instructions carefully. Use ***only*** the information provided (i.e. do not look up information on your cell phone or use your own knowledge about any of the topics, etc).

What Happened:

You were recently at a house party near campus and had been drinking alcohol. Another individual at the party started an argument with you which lead to a physical fight. During the fight, you hit the other person over the head with the glass you were holding. Unfortunately, the other person was knocked unconscious and suffered a head injury and is pressing charges. You are being charged with Aggravated Assault which is a is a second degree felony in Pennsylvania. If you are found guilty, you could be sentenced to ten years in prison, be expelled from IUP, and have to pay thousands of dollars in legal and restitution fees. However, you've heard that you may be able to avoid punishment by pretending that you do not have the ability to participate in trial (incompetent to stand trial).

Instructions:

- You are about to undergo an evaluation as part of the pre-trial proceedings.

- Pretend that you do not have the ability to participate in trial, using ***only*** the information provided.

- Do ***not*** pretend that you have a particular illness or a problem such as trouble speaking in order to trick the evaluator

- If you can **successfully** fool the evaluator, you will be **entered into a drawing to have a chance to win 1 of 3 Visa gift cards in the amount of $100, $50, or $25**.

- If you are caught faking by the examiner or do not try to follow the instructions, you will ***not*** be entered into the drawing.

- Beware, the evaluator may ask questions to see if you are faking.

Helpful tips for faking:

- In order to convince the evaluator that you cannot stand trial, you must make the evaluator believe that you have severe enough difficulties with one or more of the below abilities that you cannot participate in trial.

- The evaluator may ask about a number of different symptoms and abilities. **Do not** say that you have trouble with/experience every problem that the examiner asks about; reporting too many symptoms is a common mistake of people who are faking.

- If the examiner asks if you experience a symptom which seems overly odd, do not say that you experience it. People who are faking often report overly odd symptoms.

3 main abilities are related to competency to stand trial:

- 1) How well you understand facts about trial (i.e., what goes on during a trial)

- 2) How well you can apply the facts about trial to your own legal situation

- 3) How well you can communicate with your defense attorney and assist in your defense

The evaluator may assess your ability:

1. To understand your current legal situation.
2. To understand the charges against you.
3. To understand the facts relevant to your case.
4. To understand the legal issues and procedures in your case.
5. To understand legal defenses available on your behalf.
6. To understand the dispositions, pleas (e.g. guilty, not guilty, etc.), and penalties (e.g., jail) possible.
7. To identify and understand the likely outcomes in your case.
8. To identify the roles of defense counsel, the prosecuting attorney, the judge, the jury, the witnesses, and the defendant.
9. To identify and locate witnesses.
10. To relate to your defense attorney.
11. To trust and to communicate relevantly with your defense attorney.
12. To comprehend instructions and advice.
13. To make decisions after receiving advice.
14. To maintain a collaborative relationship with your attorney and to help plan legal strategy.

15. To be able to follow along with testimony and be able to identify contradictions or errors from how you remember the events.
16. To testify relevantly and to be cross-examined if necessary.
17. To challenge prosecution witnesses.
18. To tolerate stress at the trial and while awaiting trial.
19. To refrain from irrational and unmanageable behavior during the trial.
20. To disclose pertinent facts surrounding the alleged offense.
21. To protect yourself and utilize the legal safeguards available to you.

Appendix C

Feigning Schizophrenia and Incompetency to Stand Trial Instructions

- You will have approximately 20 minutes to read the below instructions and prepare
- You will not be able to ask the experimenter any questions about the instructions. If you do not know a word or understand something and it is about a particular symptom, do not use that particular symptom (use the others you understand). Otherwise, do your best.
- You should ***not*** tell the experimenter anything about the instructions you've been provide
- Please follow the instructions carefully. Use ***only*** the information provided (i.e. do not look up information on your cell phone or use your own knowledge about any of the topics, etc).

What Happened:
You were recently at a house party near campus and had been drinking alcohol. Another individual at the party started an argument with you which lead to a physical fight. During the fight, you hit the other person over the head with the glass you were holding. Unfortunately, the other person was knocked unconscious and suffered a head injury and is pressing charges. You are being charged with Aggravated Assault which is a is a second-degree felony in Pennsylvania. If you are found guilty, you could be sentenced to ten years in prison, be expelled from IUP, and have to pay thousands of dollars in legal and restitution fees. However, you've heard that you may be able to avoid punishment by pretending that you have the mental illness Schizophrenia, and as a result, do not have the ability to participate in trial (also known as incompetent to stand trial).

Instructions:

- You are about to undergo an evaluation as part of the pre-trial proceedings.
- Pretend that you do not have the ability to participate in trial because of your mental illness, using ***only*** the information provided
- Do ***not*** pretend to have any illness other than Schizophrenia
- You may refer to your instructions during the evaluation if needed, but do ***not*** remove them from the folder or allow the examiner to see your materials
- If you can **successfully** fool the evaluator, you will **be entered into a drawing to have a chance to win 1 of 3 Visa gift cards in the amount of $100, $50, or $25**.
- If you are caught faking by the examiner or do not try to follow the instructions, you will ***not*** be entered into the drawing.

- Beware, the evaluator may ask questions to see if you are faking.

Helpful tips for faking incompetency:

- In order to convince the evaluator that you cannot stand trial, you must make the evaluator believe that you have severe enough difficulties with one or more of the below abilities that you cannot participate in trial.

- The evaluator may ask about a number of different symptoms and abilities. **Do not** say that you have trouble with/experience every problem that the examiner asks about; reporting too many symptoms is a common mistake of people who are faking.

- If the examiner asks if you experience a symptom which seems overly odd, do not say that you experience it. People who are faking often report overly odd symptoms.

3 main abilities are related to competency to stand trial:

- 1) How well you understand facts about trial (i.e., what goes on during a trial)

- 2) How well you can apply the facts about trial to your own legal situation

- 3) How well you can communicate with your defense attorney and assist in your defense

The evaluator *may* assess your ability:

1. To understand your current legal situation.
2. To understand the charges against you.
3. To understand the facts relevant to your case.
4. To understand the legal issues and procedures in your case.
5. To understand legal defenses available on your behalf.
6. To understand the dispositions, pleas (e.g. guilty, not guilty, etc.), and penalties (e.g., jail) possible.
7. To identify and understand the likely outcomes in your case.
8. To identify the roles of defense counsel, the prosecuting attorney, the judge, the jury, the witnesses, and the defendant.
9. To identify and locate witnesses.
10. To relate to your defense attorney.
11. To trust and to communicate relevantly with your defense attorney.
12. To comprehend instructions and advice.
13. To make decisions after receiving advice.
14. To maintain a collaborative relationship with your attorney and to help plan legal strategy.
15. To be able to follow along with testimony and be able to identify contradictions or errors from how you remember the events.
16. To testify relevantly and to be cross-examined if necessary.
17. To challenge prosecution witnesses.

18. To tolerate stress at the trial and while awaiting trial.
19. To refrain from irrational and unmanageable behavior during the trial.
20. To disclose pertinent facts surrounding the alleged offense.
21. To protect yourself and utilize the legal safeguards available to you.

Symptoms of Schizophrenia:

- People with Schizophrenia have ***at least one*** of the following symptoms:
    - Delusions: False beliefs that are firmly held onto despite obvious evidence that the belief is false.
        - These beliefs can come in a variety of forms such as believing that others are out to get you, others can hear your thoughts, or thoughts are being inserted into your mind.
    - Hallucinations: Perceptions that seems real, but are not based on any actual stimulus.
        - Hallucinations can impact all five of the senses (i.e. people with Schizophrenia may see, hear, taste, feel, or smell things that aren't there).
    - Disorganized Speech: disorganized speech is a broad term for a number of different abnormalities in speech that may occur. This may include a person saying seemingly random words instead of understandable sentences or frequently switching topics of conversation to very loosely related topics
- Other potential Symptoms:
    - Disorganized or catatonic behaviors: random or bizarre body movements and behaviors or no movement at all
    - Negative symptoms: may include lack of facial or other expression of emotions (e.g., monotone speech or speech without any change in voice) and/or no motivation or interest in activity
- People with Schizophrenia have a total of ***at least two of the above symptoms*** (including at least 1 of the first 3 symptoms) and symptoms have to last for at least 6 months
- Symptoms are severe enough to cause problems for the person (e.g., work, school, social relationships, etc.)

Helpful tips for faking:

- ***You should make the evaluator believe that your symptoms are severe enough to cause impairment in the competency abilities detailed on page 2***

- The examiner may watch to see if your behavior matches your reported symptoms (e.g., people that hear voices will at times seem distracted).

- People who experience hallucinations (hear or see things that aren't real) typically also experience delusions (firmly believe things that clearly aren't true).

- People who hear voices commonly hear negative things about themselves (e.g, "you're not good at anything") and may hear voices telling them to do things.

- When seeing things, the hallucinations may not always be very detailed (e.g., a hallucination of a person may look more like a shadow)

- Less than half of people with Schizophrenia see things; however, when they do the images are typically of seemingly normal things (e.g., other people) and are typically in color.

- People with Schizophrenia often are not overly willing or happy to discuss their symptoms and do not typically realize that their symptoms are odd in any way (they believe what they are experiencing is real and even normal).

- Symptoms do not suddenly start; typically, they slowly begin over a period of time and increase in amount and how bad they are.

- If the examiner asks if you experience a symptom which seems overly odd, do not say that you experience it. People who are faking often report overly odd symptoms (e.g., seeing aliens).

- Do not say that you experience every symptom that the examiner asks about; reporting too many symptoms is a common mistake of people who are faking.

- Be specific if asked about symptoms (e.g., what you hear, see, or believe) and don't respond with "I don't know" frequently.

- Having Schizophrenia does not mean that a person has an intellectual disability. People who are faking may confuse mental illness with intellectual disability (formerly known as mental retardation).

Appendix D

Control Group Instructions

- You will have approximately 5 minutes to read the below instructions and prepare
- You will not be able to ask the experimenter any questions about the instructions. If you do not know a word or understand something and it is about a particular symptom, do not use that particular symptom (use the others you understand). Otherwise, do your best.
- You should ***not*** tell the experimenter anything about the instructions you've been provide
- Please follow the instructions carefully. Use ***only*** the information provided (i.e. do not look up information on your cell phone or use your own knowledge about any of the topics, etc).

What Happened:

You were recently at a house party near campus and had been drinking alcohol. Another individual at the party started an argument with you which lead to a physical fight. During the fight, you hit the other person over the head with the glass you were holding. Unfortunately, the other person was knocked unconscious and suffered a head injury and is pressing charges. You are being charged with Aggravated Assault which is a is a second-degree felony in Pennsylvania. If you are found guilty, you could be sentenced to ten years in prison, be expelled from IUP, and have to pay thousands of dollars in legal and restitution fees.

Instructions:

- You are about to undergo an evaluation as part of the pre-trial proceedings.
- Respond honestly to all of the evaluators questions
- Do not in any way attempt to trick or lie to the evaluator
- If you put forth **good effort** and **follow instructions**, you will be **entered into a drawing to have a chance to win 1 of 3 Visa gift cards in the amount of $100, $50, or $25**.
- If you display lack of effort or do not follow the instructions you will ***not*** be entered into the drawing.

Appendix E

Manipulation Check

Participant Number _____

For the following questions, please rate your responses on a scale of 0-4 where:

0	1	2	3	4
None	**A little**	**Moderate**	**A lot**	**Extreme**

1. How well did you understand the instructions? ____

    a) Please briefly describe the instructions you were given:

    _____

    _____

    _____

    _____

2. How well did you follow the instructions? ____

    a) Please briefly describe what you did to follow the instructions (e.g., what symptoms did you fake if any? What problems did you fake? Did you behave in any particular way?)

    _____

    _____

    _____

    _____

    b) Please briefly describe any way in which you did *not* follow the instructions (e.g, things you were asked to do but did not or things you were not asked to do but did):

    _____

_____

_____

_____

3. How much did past knowledge about mental illness or competency to stand trial influence your behavior and participation? ____

    a) If past knowledge influenced your participation, please briefly describe how:

_____

_____

_____

_____

4. How much did you know about this study before you started? ____

    a) Please describe your prior knowledge:

_____

_____

_____

_____

******Please make sure you've included your participant number at the top of the page**

Appendix F

Screening Questionnaire

For the following questions, please rate your responses on a scale of 0-4 where:

0	1	2	3	4
None	**A little**	**Moderate**	**A lot**	**Extreme**

1. How much do you know about serious mental illness, specifically about diagnoses and their associated symptoms?
2. How much exposure have you had to seriously mentally ill individuals? (Personally or professionally)
3. How much do you know about competency to stand trial evaluations?

Please answer the following questions with yes or no:

1. Have you ever been diagnosed or treated for a serious mental illness?
2. Do you know enough about serious mental illness to easily and accurately diagnose a person?
3. Have you ever undergone a competency to stand trial evaluation?
4. Have you ever been involved in conducting a competency to stand trial evaluation?

Appendix G

Informed Consent for Forensic Evaluations (b)

Information Concerning Participation in a Research Study

Title: Forensic Evaluations (b)

You are invited to participate in a research study. The following information is provided to help you make an informed decision whether or not to participate. Your participation is completely voluntary; there are no consequences for choosing not to participate. You must be at least 18 years old to participate in this study.

Purpose of the Study: The purpose of this study is to examine the performance of a forensic assessment measure in a simulated forensic evaluation. This study which will require approximately 35-55 minutes of your time.

Risks & Benefits: There are minimal risks associated with participation in this study. If you become upset or are concerned about any aspect of the study you may withdraw from the study at any time without penalty by notifying the experimenter. If you choose to withdraw from the study any data already collected from you will be destroyed. Although this study is not designed to help you personally, you may find the learning experience enjoyable. You may learn a little bit about how psychological research is conducted and about how forensic psychologists conduct evaluations.

Privacy: You and any data collected through your participation will be identified by a participant number (no identifying information). As a reminder, any data collected about you in the Screening Questionnaire administered through SONA Systems will be stored on a password protected computer for three years after which the data will be deleted.

Compensation: Completion of Forensic Evaluations b earns one (1) credit towards the research requirement in PSYC 101. Additionally, if you successfully complete the study, you will be entered in a drawing for a chance to win one of three Visa gift cards in the amounts of $100, $50, and $25. You are free to decide not to participate in this study or to withdraw at any time by notifying the researcher. Withdrawing will not adversely affect your relationship with the investigators or IUP. Participation in human participant research is not required to earn credit in any class, and your professor is required to offer an alternative method of obtaining credit in the form of reviewing a research article.

Questions: You may ask questions of the researcher and have those questions answered, before agreeing to participate or after the research is concluded. You may email the researcher at any time. Any information provided when contacting or communicating with the researcher will be kept strictly confidential. If you have any questions about the study or your rights as a research participant, you may contact the researcher: Alynda Randolph, M.A., cpmt@iup.edu or her faculty advisor, Dr. Margaret Reardon (724/357-2579), Margaret.Reardon@iup.edu.

By signing below, you willingly consent to participate in this research.

Print Name: _____

Sign name: _____

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

Appendix H

Debriefing Form

Debriefing

Thank you for participating in the study!

This study assessed the effectiveness of the Atypical Presentations (ATP) Scales, a tool that screens for potential feigning of psychiatric symptoms and incompetency to stand trial. The ATP scales are built into the Evaluation of Competency to Stand Trial-Revised, an assessment measure used in competency evaluations. Participants were randomly assigned to either a control group and gave honest responses or were assigned to one of 5 feigning (i.e. "faking") groups. All participants received the same vignette about legal involvement and the study was designed to simulate a competency to stand trial evaluation. Participants in the feigning groups received instructions on how to feign one of the following: Schizophrenia, a Manic Episode, incompetency to stand trial, Schizophrenia and incompetency, or a Manic Episode and Incompetency. All participants were administered the ATP Scales as well as another malingering screen, the Miller Forensic Assessment of Symptoms Test (M-FAST). The results of the ATP Scales will be compared to the results of the M-FAST.
Although you were informed that you would only be entered in the drawing for a Visa gift card if you put forth good effort, followed the instructions, and/or "tricked" the examiner into believing you are genuinely incompetent to stand trial, all participants will be entered in the drawing. Please provide the experimenter with your email address where you can be contacted should you win one of the gift cards. Your email address will be kept separately from your data, used for no other purpose than to contact you should you win, and will be securely discarded following conclusion of the drawing. The drawing will not take place until all data is collected which is anticipated to take one to eight months. If you win a gift card, you will be informed via the email address you provided and will have five (5) days to confirm receipt of the email and schedule a time to pick the Visa card up at the Center for Applied Psychology.

If you have any questions or concerns about our study, please feel free to contact Ms. Alynda Randolph, M.A at cpmt@iup.edu or her faculty advisor, Dr. Margaret Reardon (724/357-2579), Margaret.Reardon@iup.edu.

For further information about competency to stand trial (CST) evaluations, related measures, and feigning in CST evaluations, please refer to: Zapf, P. A., & Roesch, R. (2009). *Best practices in forensic mental health assessment: Evaluation of competence to stand trial*. New York, NY: Oxford.

Appendix I

Sona Systems Study Information

Titled: Forensic Evaluations (b)

Description: The purpose of this study is to examine the performance of a forensic assessment measure in a simulated forensic evaluation. This study involves participation in a mock forensic evaluation and earns one (1) credit towards the research requirement in PSYC 101. The study can take up to 60 minutes. Participants who successfully complete this study have a chance to be entered into a prize drawing for 1 of 3 gift cards (one (1) $100 gift card; one (1) $50 gift card, and one(1) $25 gift card).

Eligibility: Completion of screening questions administered to all subject pool participants

Preparation: No preparation is needed to participate in this Study.

Appendix J

Table 8 Performance Statistics for all Scales, Subscales and Conditions

Table 8
Performance Statistics for all Scales, Subscales and Conditions

Measure/Scale/Condition	Cut-Score	Sensitivity	Specificity	NPV	PPV	Hit Rate
M-FAST Total Score Overall	≥ 6	.69	1.0	.62	1.0	.79
M-FAST Schizophrenia	≥ 6	.9	N/A	N/A	1.0	.9
M-FAST Incompetency	≥ 6	.25	N/A	N/A	1.0	.25
M-FAST Combined	≥ 6	.88	N/A	N/A	1.0	.88
M-FAST Control	≥ 6	N/A	1.0	1.0	N/A	1.0
RO Overall	≥ 1	.54	.69	.43	.77	.59
RO Schizophrenia	≥ 1	.5	N/A	N/A	1.0	.5
RO Incompetency	≥ 1	.5	N/A	N/A	1.0	.5
RO Combined	≥ 1	.63	N/A	N/A	1.0	.63
RO Control	≥ 1	N/A	.69	1.0	1.0	.69
ES Overall	≥ 2	.62	1.0	.57	1.0	.74
ES Schizophrenia	≥ 2	.80	N/A	N/A	1.0	.80
ES Incompetency	≥ 2	.13	N/A	N/A	1.0	.13
ES Combined	≥ 2	.88	N/A	N/A	1.0	.88
ES Control	≥ 2	N/A	1.0	1.0	N/A	1.0
RC Overall	≥ 2	.65	1.0	.59	1.0	.74
RC Schizophrenia	≥ 2	.90	N/A	N/A	1.0	.90
RC Incompetency	≥ 2	.13	N/A	N/A	1.0	.13
RC Combined	≥ 2	.88	N/A	N/A	1.0	.88
RC Control	≥ 2	N/A	1.0	1.0	N/A	1.0
UH Overall	≥ 2	.54	1.0	.52	1.0	.69
UH Schizophrenia	≥ 2	.80	N/A	N/A	1.0	.80
UH Inc	≥ 2	.25	N/A	N/A	1.0	.25
UH Both	≥ 2	.50	N/A	N/A	1.0	.50
UH Control	≥ 2	N/A	1.0	1.0	N/A	1.0
ATP Possible Overreport*	**	1.0	.23	1.0	.72	.74
ATP Schizophrenia	**	1.0	N/A	N/A	1.0	1.0
ATP Incompetency	**	1.0	N/A	N/A	1.0	1.0
ATP Combined	**	1.0	N/A	N/A	1.0	1.0
ATP Control	**	N/A	.23	1.0	N/A	.23
ATP-P	>1	.81	.54	.58	.78	.72
ATP-P Schizophrenia	>1	1.0	N/A	N/A	1.0	1.0
ATP-P Incompetency	>1	.75	N/A	N/A	1.0	.75
ATP-P Combined	>1	.63	N/A	N/A	1.0	.63
ATP-P Control	>1	N/A	.54	1.0	N/A	.54
ATP-N	>0	1.0	.23	1.0	.72	.74
ATP-N Schizophrenia	>0	1.0	N/A	N/A	1.0	1.0
ATP-N Incompetency	>0	1.0	N/A	N/A	1.0	1.0
ATP-N Combined	>0	1.0	N/A	N/A	1.0	1.0
ATP-N Control	>0	N/A	.23	1.0	N/A	.23
ATP-I	>1	.85	.77	.71	.88	.82
ATP-I Schizophrenia	>1	.90	N/A	N/A	1.0	.90
ATP-I Incompetency	>1	.75	N/A	N/A	1.0	.75
ATP-I Combined	>1	.88	N/A	N/A	1.0	.88
ATP-I Control	>1	N/A	.77	1.0	N/A	.77
ATP-B	>2	.88	.46	.67	.71	.74
ATP-B Schizophrenia	>2	1.0	N/A	N/A	1.0	1.0

ATP-B Incompetency	>2	.75	N/A	N/A	1.0	.75
ATP-B Combined	>2	.88	N/A	N/A	1.0	.88
ATP-B Control	>2	N/A	.46	1.0	N/A	.46

Table 8 Continued… Performance Statistics for all Scales, Subscales and Conditions

ATP-R	<5	.54	.89	.93	.42	.56
ATP-R Schizophrenia	<5	.33	N/A	N/A	1.0	.33
ATP-R Incompetency	<5	1.0	N/A	N/A	1.0	1.0
ATP-R Combined	<5	.38	N/A	N/A	1.0	.38
ATP-R Control	<5	N/A	.89	1.0	N/A	.89
ATP ADFCRI* **	****	.88	.54	.67	.79	.77
ATP Schizophrenia	****	1.0	N/A	N/A	1.0	1.0
ATP Incompetency	****	.75	N/A	N/A	1.0	.75
ATP Combined	****	.88	N/A	N/A	1.0	.88
ATP Control	****	N/A	.54	1.0	N/A	.54
ATP-P	>4	.58	1.0	.54	1.0	.72
ATP-P Schizophrenia	>4	.70	N/A	N/A	1.0	.70
ATP-P Incompetency	>4	.38	N/A	N/A	1.0	.38
ATP-P Combined	>4	.63	N/A	N/A	1.0	.63
ATP-P Control	>4	N/A	1.0	1.0	N/A	1.0
ATP-N	>2	.81	.46	.46	.75	.69
ATP-N Schizophrenia	>2	.90	N/A	N/A	1.0	.90
ATP-N Incompetency	>2	.75	N/A	N/A	1.0	.75
ATP-N Combined	>2	.75	N/A	N/A	1.0	.75
ATP-N Control	>2	N/A	.46	1.0	N/A	.46
ATP-I	>1	.85	.77	.74	.88	.82
ATP-I Schizophrenia	>1	.90	N/A	N/A	1.0	.90
ATP-I Incompetency	>1	.75	N/A	N/A	1.0	.75
ATP-I Combined	>1	.86	N/A	N/A	1.0	.86
ATP-I Control	>1	N/A	.77	1.0	N/A	.77
ATP-B	>6	.85	.69	.69	.85	.79
ATP-B Schizophrenia	>6	1.0	N/A	N/A	1.0	1.0
ATP-B Incompetency	>6	.75	N/A	N/A	1.0	.75
ATP-B Combined	>6	.75	N/A	N/A	1.0	.75
ATP-B Control	>6	N/A	.69	1.0	N/A	.69

Note. For M-FAST scales, RO: Reported vs. Observed; ES: Extreme Symptomatology; RC: Rare combination; UH: Unusual Hallucinations; USC: Unusual Symptom Course; NI: Negative Image; and S: Suggestibility. For the ECST-R ATP scales: R: Rational; P: Psychotic; N: Nonpsychotic; I: Impaired; B: P+N scales. Given that there is no potential for false positives/true negatives in the experimental conditions, hence the PPV will always be 1.0 and there is no potential for an NPV or to determine specificity. The same applies to the Control Condition in which the NPV will always be 1.0 and there is no opportunity to calculate the PPV and Sensitivity.

*This refers to overall data for the ATP Scales using the cut-scores used to determine a Possible Overreporting (PO) Response Style **The cut-scores recommended for determination of PO are ATP-P >1; ATP-N >0; ATP-I >1; and ATP-B >2. ***This refers to overall data for the ATP Scales using the cut-scores used for Ancillary Data on Feigning Competency- Related Impairment Response Style ****The cut-scores recommended for determination of ADFCRI are ATP-P >4; ATP-N >2; ATP-I >1; and ATP-B >6.