Predicting restoration of competence to stand trial: Demographic, clinical, and legal variables

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Predicting Restoration of Competence to Stand Trial: Demographic, Clinical, and Legal Variables

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Dissertation Submitted to the Eberly College of Arts and Sciences
at West Virginia University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Clinical Psychology

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ABSTRACT

Predicting Restoration of Competence to Stand Trial: Demographic, Clinical, and Legal Variables

Tracy A. Thomas, M.A.

Introduction. Each year, a considerable number of defendants are referred for competency to stand trial evaluation. Of those judged incompetent to stand trial, a majority are regarded as having a significant likelihood of being restored to competency. While a majority of individuals are restored to competency after restoration treatment, others are deemed incompetent to stand trial and non-restorable. For individuals deemed non-restorable, a protracted stay in a forensic-psychiatric hospital or less-restrictive placement is the norm. This often lengthy period of inpatient commitment expends a great amount of staff and monetary resources. Rationale. In order that scarce monetary and staff resources be saved, early identification of individuals likely to be found incompetent and non-restorable is essential. Presently, minimal research has examined predictors of restoration to competence. Methodology. Retrospective chart review was used to collect demographic, clinical, and legal data from a sample of 80 men court-ordered to inpatient competency restoration at a state-funded forensic-psychiatric facility. Univariate and logistic regression analyses were used to evaluate the relations of these variables with final restoration status (i.e., restored to competency or incompetent and non-restorable). Results. Results of univariate analyses indicated that a history of outpatient treatment and performance on the Assessment of Depression Inventory (ADI) Reliability scale differentiated individuals found restored to competence from those found incompetent to stand trial and non-restorable (IST-NR). Patients who had previous outpatient psychological treatment were more likely to be restored to competence than found IST-NR. Patients who did not exhibit elevated ADI reliability scale scores were more often deemed competent than IST-NR. Those who exhibited elevated scores on the scale were more often found IST-NR than restored to competence. Logistic regression analysis indicated that patients without a history of outpatient treatment were more likely found IST-NR than restored to competence. Discussion. Results suggest history of outpatient treatment and reliability of responding to psychological tests are possible discriminators of likelihood of restoration to competence. Limitations of this study include small sample size, lack of power, and homogeneity of the study sample. This study suggests two variables as important for future replication in research. It is further suggested that past research be replicated and extended in an effort to develop a model of predicting those likely to be found IST-NR, which can be used in applied settings.
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Predicting Restoration of Competence to Stand Trial:
Demographic, Clinical, and Legal Variables

For a forensic psychologist, one of the most commonly received requests is for evaluation of competence to stand trial (CST; Gothard, Rogers, & Sewell, 1995). CST evaluation and restoration interventions is said to be more costly than any other class of forensic referrals (Golding, 1992). Stone (1975) describes CST evaluations as “the most significant mental health inquiry pursued in the system of criminal law” (p. 200).

The MacArthur Research Network (2004) reports that defendants’ competence to stand trial is questioned by defense counsel (but not necessarily evaluated formally) in approximately 10% of criminal cases. In 24,000 to 60,000 cases each year, defendants are actually evaluated for competence (Bonnie, 1993; as cited in MacArthur Research Network, 2004). Other research cites the number of competency evaluations per year in the US as nearly 50,000 to 60,000, with defendants adjudicated incompetent to stand trial, but restorable (IST-R) in 20%-30% of cases (Mossman, 2007; Mossman, Noffsinger, Ash, Frierson, Gerbasi, & Hackett, et al. 2007; Nicholson and Kugler, 1991). Mossman also highlights that individuals undergoing competency restoration fill approximately 4,000 U.S. psychiatric beds at any given time, which amounts to one-ninth of available inpatient psychiatric space. In 2002, it was estimated that $300 million was spent annually in the US on competency evaluations (Zapf, Skeem, & Golding, 2002).

Clinicians have a high level of discretion in choosing the method by which they evaluate CST. While clinician’s have discretion in the manner by which they conduct competency evaluations, they typically work within certain parameters. Current American Academy of Psychiatry and the Law (AAPL) guidelines suggest that CST evaluations contain several forms of assessment. First, a clinical interview is recommended, in which the client’s background information, version of events surrounding the crime charged, mental status, and knowledge of competency-related issues is obtained. The AAPL guidelines also suggest that the presence of malingered psychopathology or incompetence be assessed during the clinical interview. Second, the guidelines suggest that collateral information be gathered concerning the
defendant’s clinical history and current mental status and functional abilities (e.g., ability to communicate with an attorney). This information can be gleaned from record review and/or interviews with secondary sources. Similar to other expert sources (e.g., Melton, Petrila, Poythress, Slobogin, Lyons, & Otto, 2007), the AAPL does not recommend the use of general clinical/psychological testing and suggests that competency-relevant instruments be used when they offer incremental validity, but not necessarily universally (Mossman et al., 2007).

An individual’s competence to stand trial is ultimately a legal determination. Judges have the final say in who is adjudicated competent, IST-R, or incompetent to stand trial and non-restorable (IST-NR). That being said, research shows that clinician opinions of competence are followed by judges in the majority of cases (e.g., 99.6% of cases; Zapf, Hubbard, Cooper, Wheeles, & Ronan, 2004). The standard by which an individual’s competency is determined was set forth in Dusky v. United States (1960). In this case, 33 year-old Milton Dusky, a defendant diagnosed with schizophrenia, was charged with rape and kidnapping of an underage female. He was referred for competency evaluation and found competent to stand trial. He was found guilty of the charges against him and sentenced to 45 years in prison. Dusky petitioned the U.S. Supreme Court and requested that the conviction be overturned on grounds that he was, in fact, IST at the time of the proceedings. The Court agreed with his argument and ordered Dusky retried. He was again found guilty and given the lesser sentence of 20 years in prison.

The Dusky decision asserts that, in order to be competent to stand trial, a defendant must have “...sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding...” (p. 402) and “...a rational as well as factual understanding of the proceedings against him” (p. 402). The Dusky standard is often described as “two-pronged,” as the defendant must be able to: (a) consult reasonably with his or her attorney, and (b) have a rational and factual understanding of the proceedings against him. The latter includes the general nature of the U.S. judicial system and the defendant’s specific case. The Dusky standard is said to exist to assure the dignity and accuracy of legal proceedings, as well as the autonomy of the defendant (Poythress, Bonnie, Monanan, Otto, & Hoge, 2002). The Dusky decision is also an extension of the due process ban against trying individuals in
absentia (i.e., when they are not physically present). *Dusky* emphasizes that defendants must be “mentally present” during court proceedings (this does not include defendants who, by choice or malice, decide to not fully participate in the judicial proceedings).

Requests for an evaluation of a defendant’s competence can be raised by defense attorneys, prosecutors, or judges. The reasons for these requests vary, from lawyers who perceive an abnormal level of difficulty in communicating with their clients and defendants exhibiting odd or inappropriate courtroom behavior, to a defendant’s prior history of questionable competency. While the exact procedures vary, each state and the federal system set forth provisions for restoration of competence. In the case that a defendant is found IST-R, he is typically court-ordered to an inpatient, forensic psychiatric facility for a 3-6 month “competency restoration period.” During this time, individuals are characteristically given both psychiatric treatment (e.g., psychotropic medication) and a didactic intervention. The didactic portion is aimed at increasing the defendant's ability to work constructively with a lawyer, understand the legal system, and gain a rational understanding of the charges against him or her. After the court-ordered restoration period, the defendant is re-evaluated for competency. Herein exists one of the more challenging clinical aspects of the CST evaluation.

In many cases, defendants fail to meet the requisite standard for competency, even after having undergone a restoration period. At this point, the forensic evaluator must make a prediction as to the likelihood that the defendant will regain competence. In *Jackson v. Indiana* (1972), the U.S. Supreme Court specifically stated that evaluators must determine whether an individual has “substantial” (p. 406) probability of regaining competency (via treatment) in the “foreseeable future” (p. 406). In *Jackson*, Theon Jackson, who was unable to communicate, read, or write, was charged with petty theft. He was evaluated for CST and it was suggested that, due to his low intelligence, chances were quite low that he would ever gain a rational and factual understanding of the proceedings against him. Still, Jackson was committed to a state forensic psychiatric facility for treatment. It was argued on his behalf that, because he was unlikely to ever regain competence, his commitment was akin to a life sentence (even though he
had been convicted of no crime). For this reason, the U.S. Supreme Court established the above-described parameters, which compel clinicians to predict the likelihood of restoring IST defendants to competency.

In West Virginia, if it is believed that an individual will regain competence, he is again court-ordered to a forensic-psychiatric facility for a restoration period and a third competency evaluation. The restoration period again typically lasts 3-6 months. Individuals not believed to have the capacity of ever regaining competency (often in cases of severe and refractory mental illness, organic disorders, and mental retardation) are deemed IST-NR. The court then has the option of dropping all charges against the defendant (if the charges are misdemeanors) or of placing the defendant under court jurisdiction for the longest possible time the defendant would have been incarcerated, had he been found guilty of the charges against him. (see Appendix A for the West Virginia code concerning competence to stand trial; see Appendix B for a flow-chart depiction of the competency to stand trial adjudicative process).

The cost of being judged IST-NR is high. Not only does the individual lose personal freedom when placed under court jurisdiction, but he also loses the ability to gain resolution of the charges against him. The cost to society is also high. It is costly for the state to house IST-NR individuals for what can be quite a protracted amount of time. It also depletes already overly-burdened staff and facility resources. Many individuals who are ultimately deemed IST-NR undergo several CST evaluations (with the resulting decision that they continue to be IST-R) before finally being adjudicated IST-NR. It is expensive to continue to evaluate these defendants, as it necessitates the hiring of forensic evaluators and continued stay in the forensic hospital for the defendant. Compounding this problem is the difficulty of predicting an individual’s restorability. Hubbard, Zapf, and Ronan (2003) found that, in the case of 15% of incompetent defendants, the forensic evaluator was unable to give a prediction as to the likelihood of restorability. Moreover, there is little existing research examining the variables that best predict restorability. Only four studies have attempted to identify predictors of restoration using individuals with known CST outcomes (i.e., Anderson & Hewitt, 2002; Carbonell, Heilbrun, & Friedman, 1992; Mossman, 2007; Rodenhauser & Khamis, 1998).
While variables that predict restoration to competency have been given minimal attention in the literature, extant research fairly well identifies those variables predicting initial competency status. In both areas of literature, researchers have typically examined three categories of variables as they relate to whether a defendant will be found initially competent or incompetent to stand trial. These include demographic characteristics, clinical/psychological variables, and legal/criminal variables. Here, the literature regarding factors related to initial competency status will be reviewed first. Second, research related to restoration of competency will be discussed. Research regarding initial competency status will be reviewed because it will potentially show similarities to competency restoration research. Moreover, it is being examined due to the small amount of available competency restoration literature.

**Research Regarding Initial Competency Status**

*Demographic characteristics.* Many studies have examined the role of demographic variables in the outcome of CST evaluations. An early study that caused a great deal of controversy was conducted by Rogers, Gillis, McMain, and Dickins (1988). In a retrospective examination of 470 outpatient fitness for trial (the term typically used in Canada with a similar denotation to CST) evaluations, Rogers et al. found several demographic variables to be important predictors of whether a defendant was judged fit for trial. Those found questionably fit or unfit were significantly more often non-white and older (fit \( m = 27.3 \) years, questionably fit/ unfit \( m = 32.3 \) years) than fit defendants. Rogers et al. also found that several clinical variables significantly differed between the fit and questionably fit/ unfit groups. Two prediction models, one based on demographics and one based on clinical variables, were constructed. Neither the model based on demographics, nor the model comprised only of clinical variables was found to better predict competence to proceed than the other. Because of the robustness of the demographic model and its ability to predict CST outcomes as well as the model using only clinical variables (with hit rates of 71.2% and 71.4%, respectively), Rogers et al. suggested potential bias, either in the referral for evaluation system or in the evaluation process itself. Specifically, the authors argued that, if the CST evaluation process is unbiased, factors such as race would not be such strong predictors of outcome. The Rogers et
al. study prompted future studies to examine the role of demographic variables and the hypothesis that bias exists in the CST evaluation process.

In a sample of 8,416 defendants evaluated for competency in both inpatient and outpatient settings, Warren, Murrie, Stejskal, Colwell, Morris, Chauhan et al. (2006) also examined the role of age and race in determinations of competence to stand trial. Warren et al.’s findings supported Rogers et al. (1988) and suggested that older (competent $m=33.4$ years, $SD=13.2$; incompetent $m=37.4$ years, $SD=13.3$) and minority defendants were more likely to be found incompetent than younger, non-minority (i.e., Caucasian) defendants. However, unlike Rogers et al. (1988), Warren et al. found clinical variables to explain more variance in competency decisions than demographic characteristics. Thus, Warren et al.’s finding did not support the hypothesis of age or race bias in the process of CST evaluations.

In a 1991 quantitative review of 30 studies published in the 1960s, 70s, and 80s, Nicholson and Kugler found demographic variables useful in predicting competency decisions. This research indicated that older, unmarried, minority defendants were more likely found incompetent than competent; however, these variables only accounted for 1% of the variance in competency status, much less than prediction by criminal and clinical variables. Similarly, in an examination of 468 inpatient competency evaluations, Cooper and Zapf (2003) found that older (competent $m=31.1$ years, $SD=11.2$; incompetent $m=34.5$ years, $SD=13.7$) and African American defendants were more frequently found IST than younger and Caucasian defendants, respectively. Cooper and Zapf also found that married and employed defendants were more likely deemed competent to stand trial than unmarried and unemployed defendants. Paralleling Warren et al. (2006), Cooper and Zapf’s findings did not support Rogers et al. (1988), as clinical variables were better predictors of CST determinations than demographic factors. Cooper and Zapf specifically addressed the conclusions of Rogers et al., stating that decisions of competency appear to be unbiased and not based solely on demographic markers.

Examining 357 Caucasian and African American males and females ordered to competency evaluation, Caldwell, Mandraccia, Ross, and Silver (2003) also found that African American defendants were more frequently found IST than Caucasians. The authors also note that African American
defendants were more often diagnosed with a psychotic disorder than Caucasian defendants. Examined with this knowledge, it is perhaps not the case that race bias exists in CST evaluations. Instead, the higher rate of referral and findings of incompetence among African American defendants might be due to a higher rate of diagnosis of certain disorders (e.g., schizophrenia) in this population (American Psychiatric Association [APA], 2000). This hypothesis has not been specifically addressed in the existing literature. While some studies (e.g., Hart & Hare, 1992; Rosenfeld & Ritchie, 1998) have found no relation between competency status and demographic variables, the majority of the extant literature is consistent. It appears that older and non-white individuals are more likely to be found IST than their younger, Caucasian counterparts. Additionally, married and employed individuals are found competent at a higher rate than defendants who are unmarried and unemployed. Whether these findings indicate racial bias in the CST process or are simply a product of coexisting psychiatric diagnoses or higher rates of diagnosis remains a question.

Clinical variables. Literature regarding the relation between clinical diagnosis and competence has been relatively clear. Several authors (e.g., Caldwell et al., 2003; Cooper and Zapf, 2003; Hart & Hare, 1992; Nicholson & Kugler, 1991; Warren et al., 2006) have found psychotic disorders (as defined by the DSM-III or DSM-IV; APA, 2000) strongly related to IST determinations. This is one of the most robust competency-related variables, both within clinical factors and taking into account demographics and legal factors as well. Several studies have found that schizophrenia, in particular, is related to findings of incompetence (Hart & Hare, 1992; Rogers et al., 1988). Nicholson and Kugler (1991) found that, for defendants diagnosed with a psychotic disorder, presence of symptoms of disorientation, impaired judgment, delusions, hallucinations, impaired memory, impaired thought or communication, and disturbed behavior were significantly correlated with incompetence to stand trial.

Another sound finding in this subsection of the literature regards the impact of “non-psychotic major” disorders on CST. Diagnoses typically referred to as non-psychotic major disorders include organic impairment, major depression, bipolar disorder, and posttraumatic stress disorders. “Non-psychotic minor” disorders usually describe adjustment and personality disorders. In the CST literature,
drug and alcohol use disorders are typically categorized separately from psychotic, non-psychotic major, and non-psychotic minor disorders. Defendants with non-psychotic major disorders are significantly more likely found IST than individuals with non-psychotic minor or drug and alcohol use disorders (Cooper & Zapf, 2003; Rogers et al., 1988; Warren et al., 2006). Individuals with non-psychotic minor disorders and substance use disorders have a significantly higher likelihood of being found competent to stand trial (Cooper & Zapf, 2003; Hart & Hare, 1992; Rogers et al., 1988).

Research shows mental retardation to be a robust predictor of competency to stand trial. In a study of mentally retarded individuals, Ho (1999) found that only 23.6% were adjudicated competent to stand trial; this finding was based upon data collected after the individuals had participated in a hospital-based competency education program during their restoration periods. Pierrel (1986; as cited in Grisso, 1992) reported that, of individuals with IQ scores less than 60 (i.e., moderate mental retardation), all were deemed incompetent to stand trial. In a study of 196 defendants aged 14 to 74 years, Heller, Traylor, Ehrlich, and Lester (1981) found a strong relation between low intelligence scores and findings of incompetence to stand trial. Nicholson and Johnson (1991) similarly found that higher scores on standardized intelligence measures were related to better performance on a CST-specific assessment (i.e., the Georgia Court Competency Test; Johnson & Mullett, 1987).

Another area of inquiry in the literature has been the relation between past psychiatric hospitalizations and CST. The two studies that examined this factor (i.e., Nicholson & Kugler, 1991; Warren et al., 2006) found defendants with a history of psychiatric hospitalization were significantly more likely deemed incompetent than those without past psychiatric hospitalizations. Psychotropic medication use has also been evaluated with a similar finding: those with a history of psychotropic medication use are significantly more likely to be judged incompetent than those without such a history (Cooper & Zapf, 2003; Warren et al., 2006).

**Malingering.** A novel aspect of the current study is examination of the relation between malingering and competency restoration decisions. Certainly, assessment of potential malingering is important to all forensic-psychological evaluations. Detection of malingering is of particular importance
to competency evaluation because feigned psychopathology or incompetence can lead to erroneous findings of unrestorability. The incorrect adjudication of individuals as IST-NR could threaten to overburden an already stressed system, as incompetent defendants are frequently housed in state-funded facilities for a significant amount of time (compared to those who are found restored to competence). Moreover, a finding of incompetence means that the charges against a defendant are not adjudicated, which is problematic for the individual and for society.

In the context of competency to stand trial evaluation, much of the malingering literature focuses on validation of specific instruments (e.g., Colwell, Colwell, Perry, Wasieleski, & Billings, 2008; Gothard, Viglione, Meloy, & Sherman, 1995; Miller, 2004). This area of literature also includes case studies of malingered incompetence (e.g., Denney, 1996; Wynkoop & Denney, 1999) and theoretical papers that assert the importance of ruling out malingering in CST evaluations (e.g., Mossman, 2000; Kirkish & Sreenivasan, 1999). In an examination of forensic competency evaluation reports, Skeem, Golding, Cohn, and Burge (1998) found that 88% of reports did not refer to malingering or feigning as having been assessed or ruled-out. Of the 12% of reports that discussed malingering, only 58% assessed malingering. In 75% of these cases, record-review and/or psychological testing were used to assess malingering. This study indicates that only a few have reported assessing for malingering. The clinicians that do discuss malingering typically do so in response to a positive finding of dissimulation. These findings are ambiguous. Perhaps evaluators of competency do not routinely assess for malingered psychopathology or incompetence. Alternatively, evaluators simply might not report assessment of malingering unless a positive finding is made.

An interesting examination of malingered incompetence was conducted by Jaffe and Sharma (1998). The authors describe the competence evaluation of nine defendants, all of whom were exhibiting unusual psychiatric “symptoms,” including, eating feces and cockroaches and seeing “little green men.” In Jaffe and Sharma’s study, eight of the nine defendants were ultimately found competent to stand trial. These results could suggest that competency evaluators are adept at assessing for and recognizing malingering. However, the extremity of the malingered “symptoms” makes the findings difficult to
generalize to the detection of more subtle dissimulation. In a recent study, Vitacco, Rogers, Gabel, and Munizza (2007) examined 100 defendants referred for competency evaluation. Results of this examination indicated that 21% of individuals undergoing competency to stand trial evaluations were probable malingerers.

Legal variables. Rosenfeld and Ritchie (1998) examined 188 defendants ordered to outpatient forensic CST evaluations. Findings suggested that those charged with a misdemeanor offense were more likely to be found incompetent to stand trial; whereas, those with felony charges had a higher likelihood of being deemed competent. Similarly, Cooper and Zapf (2003) and Warren et al. (2006) found a significant difference in competency evaluation outcome based on severity of the defendant’s charge. Specifically, individuals charged with a violent crime were more likely to be found competent than defendants charged with miscellaneous or non-violent charges. Findings are varied regarding the effect of the specific type of charge on competency determinations. Whereas Rosenfeld and Ritchie found no differences in competency status based on charge-type, Warren et al. found that those charged with violent, potentially violent, sex, or drug crimes were more likely found competent. Nicholson and Kugler (1991) found previous contact with the legal system significantly correlated with findings of competence. Similarly, results of Warren et al. (2006) indicated that criminal history significantly predicts competency; more previous contact with the law related to an increased likelihood of being judged CST. Additionally, Hart and Hare (1992), in a sample of 80 men having inpatient competency evaluations, found that the existence of a juvenile record predicted competence (although clinical variables were stronger predictors).

Research Regarding Competency Restoration

Although a fair amount of research has examined predictors of initial competency to stand trial, few studies have examined factors related to restoration of competency. In total, seven studies have examined predictors of competence restoration: Hubbard and Zapf (2003), Hubbard et al. (2003), Wolber (2008), Rodenhauser and Khamis (1998), Anderson and Hewitt (2002), Carbonell et al. (1992), and Mossman (2007). Of these seven studies, three did not examine defendants with known competency
outcomes (Hubbard & Zapf, 2003; Hubbard et al., 2003; Wolber, 2008), and four studies identified potential predictors of competency restoration using samples of defendants with adjudicated CST decisions (Anderson & Hewitt, 2002; Carbonell et al., 1992; Mossman, 2007; Rodenhauser & Khamis, 1998).

Hubbard and Zapf (2003) examined demographic, criminal, and psychiatric variables and their relation to predictions of restorability in a study of 89 IST individuals. The study did not examine defendants’ ultimate competency outcome (i.e., restored vs. IST-NR). Instead, the authors examined associations between predictions of restorability and demographic, criminal, and psychiatric variables. Hubbard and Zapf found that defendants who were older and whose charged offense was violent were more likely to receive opinions of “non-restorable” than younger defendants and those with non-violent charges. Defendants with prior criminal histories, previous contact with mental health services or psychiatric hospitalizations, previous use of psychotropic medication, and non-psychotic minor disorders were more likely than their counterparts to be predicted “restorable” or given an “undetermined” decision. Logistic regression analysis of these variables indicated that the combination of previous criminal history and violent offense accounted for 14% of the variance in restorability predictions, with an accuracy rate of 45.2% (p<.001). The addition of psychiatric diagnosis and psychiatric history increased the variance explained to 28% and achieved an accuracy rate of 53% (p<.001).

In a similar study, Hubbard et al. (2003) examined 52 defendants who had been given definitive predictions as to their likelihood of restoration. The sample in this study was the same one used in Hubbard and Zapf (2003; previously described) and included individuals found IST in either inpatient or outpatient evaluations. Of the 52 defendants, 64% were predicted to gain competency in the foreseeable future. Those predicted restorable were more likely to have a past criminal history, a non-psychotic minor diagnosis, and the ability to understand the judicial process. Those predicted non-restorable were older and lacked understanding of the court system and procedure.

Examining the reasons for non-restorability to competence across multiple evaluation sites, Wolber (2008) used a telephone survey of facilities in 45 states in the US. Findings from the survey
indicated that individuals deemed unrestorable more often had a developmental disability, brain injury, dementia, or refractory psychosis than those who were deemed restorable. Of the 45 state facilities surveyed, all 45 ranked severe cognitive impairment as the primary reason patients were unrestorable and 42 states ranked refractory psychosis/chronic schizophrenia as the second most common reason for findings of incompetence.

These three studies offer insight into factors related to predictions of restoration; however, they do not offer data regarding what is clearly the most important question: whether the defendants were ultimately restored to competency. Rodenhauser and Khamis (1998) examined predictors of restoration to competency. In a sample of 376 initially incompetent defendants whose competency status post-restoration period had been adjudicated, the authors found several significant predictors of restorability. A significant interaction was found for previous incarceration and Axis I disorder. In defendants without schizophrenia, those who had not been previously incarcerated were significantly more likely to regain competency. Surprisingly, defendants who refused their medications while in the forensic psychiatric hospital were significantly more likely restored to competency than those who did not refuse psychotropic medication. This is a particularly curious finding, as psychotropic medications are often a large part of the process of restoring IST-R individuals to competency. Rodenhauser and Khamis also found a trend, which indicated that, among individuals without an Axis II diagnosis, those with drug abuse diagnoses were less likely to regain competency than those without drug abuse disorders.

Anderson and Hewitt (2002) employed a known-groups design to examine the effect of mental retardation on competency restoration status. In a sample of 75 individuals (i.e., 70 male, 5 female), all of whom had IQ scores below 70, the researchers found restored individuals had significantly higher IQ’s \( m=66.91 \) than non-restored patients \( m=57.54; p<.01 \). Anderson and Hewitt also found African American defendants more likely restored to competency than Caucasians.

Carbonell et al. (1992) examined predictors of restoration in 152 individuals adjudicated incompetent to stand trial. Discriminant function analysis resulted in a nine-factor model. Of the nine factors most predictive of competency restoration status, six related to cognitive functioning (e.g.,
Wechsler Adult Intelligence Scale-Revised Edition [WAIS-R]; Wechsler, 1981; Performance IQ and Verbal IQ scores). In all cases, individuals restored to competency performed better on these measures than those found incompetent. Additionally, presence of an affective disorder, a “major disorder,” and psychopathy were found related to competence restoration. Those with affective disorders were more likely to be restored to competency; whereas, individuals diagnosed with major psychotic disorders (other than schizophrenia) and antisocial personality disorders were less likely restored to competence. The finding that individuals with antisocial personality disorder were frequently IST is curious, and warrants further examination.

Mossman (2007) also examined individuals with adjudicated competency restoration outcomes. In an archival record-review of 328 defendants ordered for inpatient competency restoration, Mossman found several factors predictive of incompetence. Defendants who were older, had longer hospital stays, were diagnosed with mental retardation, schizophrenia, or schizoaffective disorder, and defendants charged with misdemeanor offenses were found significantly more likely to be deemed incompetent than competent to stand trial. According to Mossman, individuals meeting these characteristics had less than a 35% chance of being restored to competence.

Rationale, Aims, and Hypotheses for the Current Study

There is great difficulty in accurately predicting restoration to competency. This is well documented by Hubbard et al. (2003), in which evaluators were unable to predict the likelihood of restoration in 42% of 89 incompetent defendants. There is a paucity of research regarding restoration to competency. Moreover, only four studies (i.e., Anderson & Hewitt, 2002; Carbonell, et al., 1992; Mossman, 2007; Rodenhauser & Khamis, 1998) have examined defendants with adjudicated competency decisions. The current study aims to add to the literature regarding predictors of restoration to competence with a known-groups sample of defendants. Similar to the aim cited by Mossman (2007), this study seeks to empirically identify predictors of whether IST-R defendants are restored to competence after a restoration period. In particular, this study will focus on evaluating predictors that are objective and accessible to clinicians.
This research will specifically examine demographic, clinical, and legal factors in individuals hospitalized for competence restoration. Certainly, accurate prediction of both restoration and non-restorability is the ultimate goal of this area of clinical research; however, from a practical perspective, identification of non-restorable individuals is arguably of greater importance. Greater time, monetary, and staff resources are utilized by those adjudicated IST-NR compared to individuals restored to competence. For this reason, the present analysis will focus on identifying variables that best differentiate individuals restorable to competence from those who are non-restorable.

A specific goal of this study concerns malingered and exaggerated psychopathology within the context of CST evaluations. While it has been stated that assessment of malingering should be included in all CST evaluations (Mossman et al., 2007; Vitacco, Rogers, Gabel, & Munizza, 2007) and that the detection of feigned symptomology is essential to the accurate formation of opinions regarding competency (Gothard, Viglione, Meloy, & Sherman, 1995), no known studies have examined the relation between objective measures of symptom feigning and CST. This is true both in the case of initial evaluation of competency and for re-evaluation of defendants court-ordered to competency restoration. The current research will thus add new information regarding the relation between performance on malingering measures and adjudicated CST outcomes.

Finally, this study aims to re-evaluate variables that have been found predictive of restoration to competency in past research (e.g., clinical diagnosis) and to examine several novel factors that potentially relate to competence restoration (e.g., GAF scores). As such, this study will be both a replication and an extension of existing literature on competency to stand trial. This research is of importance to both society and individual defendants. Identification of demographic, clinical, and legal variables that predict restoration to competency will allow clinicians to predict more accurately restorability, which will ultimately lessen the burdens on freedom and autonomy for the incompetent defendant, as well as the resources expended by healthcare and judicial systems. As minimal existing research has examined predictors of adjudicated competency restoration outcomes, this study is exploratory and will broadly examine many demographic, clinical, and legal variables.
Method

Participants

Sample Selection. The study sample included the records of 80 men who were deemed IST-R based on clinician opinion and judicial decision in West Virginia. Of the total sample, 57 (approximately 71%) were ultimately restored to competency and 23 (approximately 29%) were adjudicated IST-NR. (All but three defendants’ competency status was adjudicated. In the remaining three cases, a forensic examiner’s opinion had been rendered but no judicial decision was made by the culmination of data collection.) The study sample was gathered from records of individuals judged IST-R and subsequently court-ordered to a forensic psychiatric hospital for competency restoration. The study sample was comprehensive. It included all male patients admitted for restoration of competency to stand between April 2007 and November 2008.

The facility from which record data were gathered is state-funded, Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredited, and can accommodate up to 150 patients, both male and female, 50 of whom are typically (a) patients court-ordered for competency restoration, (b) patients deemed IST-NR and court-ordered to the hospital until a less restrictive facility is appropriate and/ or available, (c) individuals awaiting forensic evaluations other than competency (e.g., violence risk), and (d) those who have been found not guilty of a crime by reason of mental illness [NGRMI] and court-ordered to the hospital until a less restrictive facility is appropriate and/ or available. While the initial sample of records included females with IST-R statuses, women were excluded from data analysis due to small sample size (i.e., n<10), which was insufficient to statistically compare male to female patients. Furthermore, because research regarding restoration to competency in females is lacking, it was determined that inclusion of females in the final sample could introduce unwanted variability and unclear results.

In addition to male gender, patient records were selected for review based on three criteria. First, patients had to have been admitted to the hospital after a hospital-wide, computer-based charting system
was put into place in April 2007. Paper charts were not included due to logistical difficulties in obtaining those records, as well as the hospital research committee’s preference for using only computer-based records. Second, data were only gathered from those patients whose status was IST-R at admission (i.e., individuals who were IST-NR at admission were excluded, as were individuals admitted with other legal statuses, such as NGRMI). Third, in order to be included in final analyses, the patient had to have been opined either CST or IST-NR by the forensic evaluator by the time data collection concluded in March of 2008 (i.e., the defendant could not still have IST-R status).

Patients were typically court-ordered to 3-month restoration periods. Some were ordered to 6-month periods. At the culmination of the restoration period, patient’s received competence to stand trial evaluations by forensic evaluators employed from outside the facility. During their restoration periods, defendants received psychiatric treatment/ psychotropic medication and didactic courses that focused on competency-related knowledge and skills. Appendix C describes the three competency restoration group protocols utilized with the defendants under study. All patients were placed in these groups and completed them in sequential order, unless this was not clinically or logistically appropriate (e.g., cognitively lower-functioning patients often re-took groups if their progress was not adequate, patients were not started in groups if they were grossly psychotic).

Characteristics of final sample. Participants were Caucasian ($n=65$, approximately 81%) or African American ($n=15$, approximately 19%) and ranged in age from 19 to 70 ($m=40.75$, $SD=12.07$). Because state courts will not proceed against a defendant who is not competent to stand trial, all participants had pending legal charges at the time of their commitment to the forensic hospital. Patient charges varied from failure to pay child support, to sexual offenses, to first degree murder (see Appendix D and Appendix E for a list of felony and misdemeanor charges, respectively, had by individuals in the study sample). The majority of participants were court-ordered for three-month restoration periods; however, some individuals were ordered to six-month periods. This difference is based solely on judicial discretion and the initial clinical opinion.
As this examination was a retrospective chart review; no researcher-participant contact occurred. The researchers were not required to obtain informed consent from patients. Patient privacy was maintained via the use of randomly-assigned participant codes and the exclusion of potentially identifying information from data collected (e.g., name, birth date). Research approval was obtained from the West Virginia University Institutional Review Board as well as the research committee of the forensic hospital.

**Procedures**

This research is based upon retrospectively examined archival data. Data of primary interest included demographic (e.g., marital status), clinical (e.g., admit diagnosis), and legal (e.g., charge) variables. Appendix F presents the list of variables collected from patient charts. In addition to general demographic, clinical, and legal factors, the present study sought to examine the relation between scores on several malingering instruments (i.e., Assessment of Depression Inventory [ADI], Mogge & LePage, 2004; Miller Forensic Assessment of Symptoms Test [M-FAST], Miller, 2001; Structured Interview of Malingered Symptomatology [SIMS], Widows & Smith, 2007) and restoration to competency.

Competency evaluations were done by several board-eligible and one board-certified forensic psychiatrist, who were hired by the state to conduct independent CST evaluations. The evaluators were trained at the same institution and by the one board-certified forensic examiner. The evaluators’ opinions regarding patients’ competency were submitted to the court for a final decision regarding the patient’s status. In 77 of 80 (96%) cases, the courts agreed with the opinion of the forensic evaluator. In the remaining three cases, a judicial decision had not been reached by the culmination of data collection.

Data collection was completed by the primary researcher and a doctoral-level research assistant. For purposes of assessing inter-rater reliability, 20% of charts (i.e., 16 charts) were coded by both researchers. Inter-rater reliability was calculated using a whole percent agreement formula and found to be acceptable (i.e., 92%). Inter-rater reliability was calculated separately for each variable and all coding discrepancies were resolved by the researchers by re-evaluating the chart data and coding manual. All discrepant data points were able to be resolved. One difficulty that frequently arose during coding regarded the “felony” (yes/ no) variable. Whether the patients’ charges were felony or misdemeanor
offenses was often not stated explicitly in the chart. In order to code this variable, each patient’s specific charges were noted and the West Virginia General Laws Ch. 61 (2007) were used to code felony versus misdemeanor charge.

**Measures**

*Assessment of Depression Inventory (ADI).* The ADI is a 39-item, brief, self-report screener for depressive symptomology. Respondents are asked to respond to the ADI regarding symptoms experienced over the past two-week period. Embedded within the ADI are three validity scales, which detect random responding, feigning, and reliability of responding. For purposes of this study, individuals were considered “malingering” on this measure if their score on the Random, Malingering, or Reliability subscales met or surpassed clinical cutoffs of 8, 14, and 7, respectively. These cut-scores are those suggested by the authors of the instrument (Mogge, n.d.).

The ADI depression scale shows good concurrent validity with other measures of depression, including the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), the Personality Assessment Inventory (PAI; Morey, 1991) depression scale, and the Zung Self-Rating Depression Scale (ZSDS; Zung, 1965). The ADI validity scales also show good concurrent validity when compared with PAI validity scales (i.e., Negative Impression Management [NIM], Malingering Index [MAL], Positive Impression Management [PIM], Defensiveness Index [DEF]). Research on the ADI (i.e., Clegg, Fremouw, & Mogge, 2009; Messer, 2009; Mogge, 2006; Mogge, Steinberg, Fremouw, & Messer, 2008) indicate that it has strong sensitivity, specificity, positive and negative predictive power, hit rates, and area under the curve in both inpatient and outpatient samples.

*Miller Forensic Assessment of Symptoms Test (M-FAST).* The M-FAST is a 25-item, structured interview that assesses feigned psychological symptomology. The measure consists of seven subscale scores, which specifically examine unusual hallucinations, reported versus observed behavior, extreme symptomatology, rare symptom combination, negative image management, unusual symptom course, and suggestibility. The M-FAST yields a total score, which is used to judge the probability that a respondent is attempting to feign or exaggerate psychological symptoms. The author-recommended cut-score of 6
was used to classify malingerers in this study. The M-FAST has shown the ability to differentiate malingerers from honest responders (Miller, 2001; Miller 2004). It has also shown good construct and criterion validity specifically in a sample of incompetent to stand trial defendants (Miller, 2004).

Structured Interview of Malingered Symptomatology (SIMS). The SIMS is a 75-item, self-administered assessment of malingered symptomology. The SIMS assesses five potential areas of feigning, including: psychosis, neurological impairment, amnesic disorders, low intelligence, and affective disorders. The SIMS total score indicates global likelihood of feigning psychological symptomology. Participants were classified as malingering if their SIMS score met or exceeded the author-recommended cut-score of 14. The SIMS has shown good sensitivity, specificity, and general utility in detecting malingering in a broad range of contexts (Widows & Smith, 2007).

Design and Data Analysis

The current research is retrospective in nature and involves data collection via chart review. As such, no direct contact with participants occurred. The focus of the research was examination of potential predictors of restoration to competency in individuals ordered to competency restoration after being found IST-R. Variables that have been previously evaluated, as well as novel variables, were included in the analysis. Charts for review were thus selected on the basis that the reference patient was previously or currently hospitalized for competency restoration. For purposes of data analysis, participants were assigned to one of two discrete groups: restored to competency to stand trial or IST-NR.

Data analysis was conducted in two steps. Group differences were first examined using \( t \)-tests and chi-square analyses. In the cases of variables with small (i.e., < 5) and/ or uneven cell sizes, the Fisher’s Exact Test was used instead of chi square analysis. Results of these analyses were used to select variables for inclusion in the regression analysis. Variables were selected for inclusion if they met either of two criteria. First, variables showing a relation to competency status at the \( p \leq 0.10 \) significance level were included in the analysis. Second, variables supported by past research findings were tested via logistic regression.
Results

Preliminary Analyses and Sample Characteristics

Demographic variables. No significant between-groups differences in age, race, marital status, or education were found (see Table 1 for between-groups comparison of demographic characteristics).

Clinical variables. In total, eleven clinical variables (not including the measures of malingering) were evaluated. Included were eight factors coded dichotomously as “yes” or “no”: diagnosis of bipolar disorder, diagnosis of a thought disorder, mental retardation, history of outpatient psychological treatment, past inpatient psychiatric treatment, antipsychotic medication use during the restoration period, antidepressant medication use during the restoration period, and mood stabilizer medication use during the restoration period. Three clinical variables were coded continuously: number of competency restoration courses attended, GAF score at admission, and IQ (see Table 2 for between-groups comparison of clinical variables). Results of chi-square analyses indicated that one clinical variable significantly differentiated the IST-NR and competent groups: past participation in outpatient treatment ($\chi^2=6.45, p=.011$). Patients who had previous outpatient psychological treatment were more likely to be restored to competence ($n=45, 78.9\%$) than found IST-NR ($n=12, 21.1\%$). For patients without previous outpatient treatment, there was an equal likelihood of being restored to competence ($n=11, 50\%$) and being deemed IST-NR ($n=11, 50\%$).

Results of the five malingering assessments (i.e., M-FAST and SIMS total scores and three ADI sub-scale scores) were coded dichotomously as whether the individual’s score surpassed the clinical cutoff given in each administration manual. Between-groups differences on malingering screeners were evaluated using Fisher’s Exact Tests, results of which are presented in Table 3. Results indicated that the ADI Reliability scale significantly differentiated the competent from IST-NR groups ($p=.027$). Of the individuals who did not exhibit elevated ADI reliability scale scores, 81.5\% ($n=22$) were ultimately deemed competent and 18.5\% ($n=5$) were found IST-NR. Of those who did exhibit elevated scale scores, 37.5\% ($n=3$) were restored to competence and 62.5\% ($n=5$) were found IST-NR. Because of the small number of individuals who exhibited elevated scores on the ADI reliability scale, results for this group
should be interpreted cautiously. As an exploratory analysis, the malingering measures were examined as continuous measures (i.e., based on total score using t-test analyses). These results mirrored those found when patient’s scores were coded dichotomously. The ADI Reliability scale significantly differentiated patients deemed IST-NR from those restored to competence. Those classified as IST-NR scored higher on the scale than those restored to competency.

**Legal variables.** Information regarding six legal variables was collected. These variables were coded dichotomously as “yes” or “no,” and analyzed for between-groups differences using chi-square analyses. Legal variables included: person-crime charge, sex-crime charge, property-crime charge, miscellaneous crime charge, history of legal charges, and felony charge. No statistically significant between-groups differences were found for these variables (see Table 4 for results of chi-square analyses on legal variables).

**Additional variables.** Several aspects of length of hospital stay were also calculated and analyzed (see Table 5 for descriptive characteristics of these variables). For individuals ultimately found competent, length of stay averaged 105.16 days (SD=54, minimum=1, maximum=249, median=88.00). Those adjudicated IST-NR stayed an average of 204.80 days (SD=124.42, minimum=60, maximum=533, median=173.00). This difference was statistically significant (p=.003).

The number of days between admission and submission of the forensic opinion regarding competency was also compared between groups. This length of time averaged 90.82 days (SD=52.10, minimum=1, maximum=243, median=76.00) for patients ultimately adjudicated competent. For the IST-NR group, the average time from admission to CST decision was 139.22 days (SD=86.71, minimum=44, maximum=363, median=126.00). Results of an independent samples t-test indicated that differences between groups were statistically significant (p=.019). For those found IST-NR, time from the competency decision to discharge averaged 72.37 days (SD=76.31, minimum=5, maximum=255, median=34.00); whereas, for those adjudicated CST, days between the forensic opinion and discharge averaged 15.31 days (SD=15.93, minimum=1, maximum=118, median=12.00; p=.004). Between-groups comparison of total number of CST evaluations/ restoration periods was not statistically significant.
These variables were evaluated to aid in supporting the rationale for this and future studies but were not included in the main analyses.

**Logistic Regression Analysis**

*Selection of predictors.* A two-pronged approach was used in selecting predictors for the logistic regression analysis. Due to the large number of variables collected, all were not included in the logistic regression analysis. Instead, variables were selected for inclusion in this analysis if they met at least one of two criteria: (1) a chi-square or *t*-test that (based on current study data) was significant at *p* ≤ .10, or (2) past literature found that the variable predicted restoration status. Decisions based on these criteria utilized both research examining *restoration* to competency, as well as competency decisions upon initial evaluation (i.e., sans a restoration period). Based on these criteria, 10 variables were appropriate for regression analysis: race (white, black), marital status (i.e., single, married, divorced), bipolar disorder, thought disorder, mental retardation, history of inpatient treatment, history of outpatient treatment, crime against person charge, sex crime charge, and property crime charge. Race, marital status, bipolar disorder, mental retardation, thought disorder, history of inpatient treatment, and charge-type were included in the analysis based on past research; whereas, history of outpatient treatment was included based on a significant chi-square analyses observed in the current sample.

Although the ADI Reliability subscale met the first of the above-described criteria, it was excluded from logistic regression analysis due to small sample size (i.e., *n*=35). As logistic regression omits cases with one or more missing data points from the analysis, inclusion of the ADI Reliability subscale scores would have significantly reduced the size of the tested sample, greatly decreasing power to detect statistically significant differences.

*Logistic regression analysis.* Predictors selected for inclusion in the logistic regression were submitted via a forward stepwise method. Results of logistic regression indicated a statistically significant model (*χ*2=6.65, *p*=.01); however, the “model” only included one variable: outpatient treatment (*exp*[b]=4.03, *p*=.01). In the regression analysis, “no outpatient treatment” was coded as “1” and IST-NR was coded as “1.” As such, this result indicates that patients without a history of outpatient treatment were
more likely to be found IST-NR than CST. Using only the outpatient treatment variable resulted in a correct prediction rate of 81.5% for the competent group, 47.8% for the IST-NR group and an overall correct classification rate of 71.4%. See Table 6 for summary of logistic regression results.

**Discussion**

The broad aim of this research was to examine variables related to outcome after competency to stand trial restoration. Several studies have examined predictors of initial competence decisions; that is, whether an individual is deemed competent upon his first evaluation after competence to stand trial is questioned. *Restoration* to competence, however, has been greatly overlooked in research. Only seven studies have examined restoration of competency, three of which did not examine individuals with adjudicated CST decisions (i.e., did not use known-groups designs). Only four studies have examined predictors of CST restoration in a population with actual, adjudicated CST outcomes (i.e., Anderson and Hewitt, 2002; Carbonell et al., 1992; and Mossman, 2007; Rodenhauser & Khamis, 1998). As such, the current study represents an addition to the minimal literature on restoration to competence and even smaller literature that utilizes a known-groups sample of individuals with adjudicated CST decisions. The purpose of this study was not only academic, but was also utilitarian. Variables related to final CST status were examined because knowledge of such predictors will ultimately result in resource savings (e.g., monetary, staff). Following this goal, predictors were purposefully collected and coded in a manner that would be easily translated to the clinical setting.

A more specific aim of this research was to examine a novel variable: malingering. To date, no known studies have examined the relation between objective tests of malingering and outcome of forensic CST evaluations. Examination of malingering is certainly of practical importance to this area of forensic-clinical practice. Erroneous findings of IST-NR not only prevents adjudication of legal charges, but places defendants in a position of residing in a forensic facility for a much longer period of time than if they had been restored to competence. This additional time under court jurisdiction and facility supervision necessarily entails greater use of scarce monetary and staff resources.
Whether forensic evaluators take into account the results of psychological tests of malingering is unknown. Moreover, it is not known how such information is used by evaluators if it is examined. The outcome of malingered psychopathology in CST evaluations is thus unknown; whether those who feign psychopathology are successful in being found incompetent to stand trial remains a question. This study sought to examine malingered psychopathology and restoration to competence. Future research should look specifically at malingered incompetence. Also a question for future research is the relation between performance on measures specific to malingered incompetence (e.g., ECST-R; Rogers, Tillbrook, & Sewell, 2004) and judicial decisions of restoration of competence. GAF scores upon admission and number of competency restoration group-sessions attended were also novel variables examined in this research.

Findings: Comparison to Past Studies of Restoration to Competence

Demographic variables. Contrary to past research, this study did not find that age or race differentiated between competent and IST-NR patients.

Clinical Variables. Hubbard and Zapf (2003) and Hubbard et al. (2005) found previous contact with mental health services (both inpatient and outpatient) predictive of restoration of competence. In line with these findings, the current study suggests that a lack of past outpatient psychological treatment predicts IST-NR status. Thinking of this finding in its converse, this finding indicates that individuals with a history of outpatient treatment are more likely to be restored to competence. A possible explanation for this finding is that this group of individuals (i.e., those restorable to competence) has less severe mental illness, which is amenable to outpatient treatment and that these individuals better adhere to outpatient treatment regimens. A second possibility is that these patients have more severe mental illness, but have engaged in outpatient “medication management” (not necessarily consistently). Individuals with treatment-responsive disorders are perhaps more easily restored to competence. Further research regarding this finding will be needed to determine its meaning. Clinical variables found related to competency restoration in past research suffered from small cell size in the current study. Thus, the current findings do not contradict, but do not support, past findings concerning clinical factors.
**Legal Variables.** Past research has indicated that several legal variables predict restoration to competence. These variables include offense severity (Hubbard & Zapf, 2003) and prior criminal history (Hubbard & Zapf, 2003; Hubbard et al., 2003). The current research did not find any legal variables to discriminate between patients restored to competence and those found IST-NR.

**Limitations**

A main limitation of this study concerns sample size, power, and risk of Type II error. In order to decrease the chance of failing to detect significant relations, the original variable pool was reduced from 25 to 10. Still, the ratio of predictors to participants (i.e., 10:77) is not ideal, as many researchers assert the need for 10-15 participants per predictor explored. Moreover, small and uneven cell sizes existed with several predictors, potentially making the variables unstable and susceptible to unreliable results. Small sample size was perhaps especially problematic in the case of race, in which Caucasian participants outnumbered African Americans by approximately 4:1. As race has been the focal point of much debate in this area of literature, the ability to test race effects would have added much to the study. Small sample sizes might have contributed to some of the more surprising non-significant findings, specifically, those regarding mental retardation and thought disorder. Small sample size also precluded the full testing of a main variable of interest: malingering.

A second limitation of this study concerns homogeneity of the population studied as well as the team of forensic evaluators. The current sample was taken from one hospital only, which is comprised largely of Caucasian, rural-residing males. Warren, Rosenfeld, Fitch, and Hawk (1997) found that the jurisdiction (i.e. state) under which an individual is adjudicated can affect both whether one is referred for CST evaluation and the outcome of that evaluation. These differences were found even as the legal standard for competency did not differ across locations. This finding suggests that generalizability of outcomes in CST research must be examined, especially in the case of a single-site sample, such as the present one. Certain variables, by nature of their clinical severity might have been underrepresented in the sample. Individuals with certain conditions that are treatment resistant and render individuals unlikely to
be restored to competence (e.g., mental retardation) might have been initially found IST-NR, thus not part of the study sample.

Additionally, the setting from which the current sample was gathered employs one set of forensic evaluators who were trained and supervised by a single Diplomat in forensic psychiatry. The evaluative style, as well as the evaluative standards that were used for determining competency, were likely similar among evaluators. Moreover, the style and standards used by these evaluators might vary greatly from that of evaluators at other facilities, making generalization of results difficult.

Importance of Future Research

Towards the goal of discovering clinically-useful information regarding predictors of IST-NR status, several variables concerning length of patient stay in the forensic hospital were examined. These analyses indicate that individuals deemed IST-NR spend more total days in the hospital, more days in the hospital between admission and a competency decision, and more days in the hospital between the competency decision and discharge. The importance of further research in this area is emphatically supported by current findings. Individuals ultimately found IST-NR spent an approximate average of 100 more days in the hospital than patients who are restored to competence. This finding is in line with other studies, which have compared length of hospital stay between restored and unrestorable defendants (e.g., Davis, 1986; Nicholson & McNulty, 1992). Not only is this difference noteworthy in regard to use of hospital resources, but it is extremely significant in terms of monetary costs. With the daily cost at the forensic facility under study at $500, an individual ultimately found IST-NR costs the state approximately $50,000 more than patients ultimately judged competent. Several factors could have resulted in the group differences in time spent in the hospital from admission to CST decision and from admission to discharge.

First, it could be the case that individuals ultimately deemed IST-NR were more frequently ordered to 6-month versus 3-month restoration periods. Because such information was not collected, this hypothesis cannot be evaluated. A second hypothesis is that those in the IST-NR group were more often found IST-R at least once prior to their final decision and were henceforth court-ordered to a greater number of restoration periods and re-evaluations. This would have the effect of increasing the total time
to the competency decision and discharge for these patients. However, data regarding number of competency evaluations submitted to by patients did not support this hypothesis; in fact, no significant between-groups differences were found in mean number of CST evaluations/ restoration periods.

The third logical hypothesis is that patients ultimately judged IST-NR spend more total time in the hospital because of the amount of time they spend in the hospital after adjudication, but before suitable alternative placement is secured. This theory is supported by a statistically significant between-groups difference in the number of days spent in the hospital between the date of the forensic CST opinion and the date of discharge. It is this writer’s experience that individuals with IST-NR determinations often spend a significant amount of time waiting for placement after adjudication of competency status. Alternatively, patients deemed CST are returned to jail or to the community (if their charges are dropped) relatively quickly. The most logical explanation for the group differences in length of hospital stay seems to regard the time spent in transitioning IST-NR individuals into less-restrictive placements. This being the case, a massive amount of additional staff and monetary resources is being spent on individuals who are IST-NR, compared to those who are competent.

Further support for research regarding predictors of non-restorability to competence is clear when the cost of housing IST-NR patients in forensic hospitals is compared to the cost of their staying in a less restrictive facility. The forensic hospital from which the sample was gathered is adjacent to a “transitional living facility (TLF)” that is also state-funded. This facility is considered a “step-down” from the forensic hospital, in that it is less restrictive and utilizes less staff per patient. Patients who do not need the level of supervision offered by the forensic hospital, but who are not appropriate for un-supervised community living, are the typical residents of the TLF. A significant number of patients deemed IST-NR at the forensic hospital are ultimately placed at the TLF. Whereas the per-day hospital cost is approximately $500, the per-day cost of the TLF is approximately $250. This study found that individuals in the IST-NR group stayed an average of approximately 72 days in the hospital between their final competency decision and discharge. This time period averaged approximately 15 days for patients in the CST group. Assuming that this 57-day difference could be spent in the TLF, the state would save $14,250 per patient. Put
another way, if placement planning were started earlier, it is likely that patients would spend less time in the hospital after adjudication of their competency, which would be significant regarding resource savings.

Conclusion

Two variables significantly distinguished patients restored to competence from individuals deemed IST-NR: history of outpatient treatment and the ADI Reliability scale. These findings are certainly not a panacea, but point towards the value of extending this body of research. In particular, it remains possible to determine variables that predict restoration to competence and that could be used in applied clinical practice. Additionally, Identification of predictors of incompetence to stand trial will assist the judicial system in carrying out adjudicative processes in a timely manner, and will benefit the individual patient who is deemed IST-NR and will ultimately need community placement. Overarching these benefits is the cost savings that would occur with earlier identification of individuals most likely non-restorable to competence. In order to be most clinically useful, researchers should specifically focus on examining individuals with adjudicated competency status (i.e., “known-groups”). Additional studies would benefit from examining more demographically diverse samples. Additionally, research should be conducted at multiple sites within and across states and with competency evaluators who differ regarding training and supervision, in order that generalization of findings can occur.

Several particular areas of study can be suggested based on the results of this and previous empirical work. Indeed, it is suggested that reliability of responding to psychological measures and history of outpatient treatment be further examined. Researchers should continue to examine demographic variables, specifically, age, race, and marital status, in order to replicate past research. The relation of inpatient psychiatric treatment to competency restoration also warrants further exploration, due to past research indicating a relation between this variable and competence to stand trial. The effect of specific disorders, particularly bipolar disorder, thought disorder, and mental retardation, should continue to be examined. These variables have been found robust predictors of initial competency status in previous studies, but were unable to be thoroughly examined in the current study. Type of charge (e.g., property
crime, sex crime; felony, misdemeanor) should also be further examined due to findings of predictive power in past studies but lack of discriminating results in the current study. Due to small sample size, this study was unable to test the relation between malingering and restoration to competence adequately. Because the effect of malingering on adjudicated competency outcomes is of great importance, and because it is an interesting and novel factor, future studies should examine the relation between these constructs.

Research driven practice is also needed if one hopes to be a trusted expert of the court. From a broader perspective, knowledge regarding factors influencing likelihood of competency restoration allow for the better allocation of minimal resources. For individuals likely to regain competence, all efforts can be made (e.g., didactics) in preparation for the competency evaluation. For those who are unlikely to regain competence, planning for placement and aftercare can begin sooner and ultimately be more thoughtful and effective.
References


WV Gen. Laws ch. 27 § 6 (2007).


Appendix A

West Virginia Code Regarding Commitment for Competence Restoration
(WV Gen. Laws Ch. 27 § 6, 2007)

CHAPTER 27. MENTALLY ILL PERSONS.
ARTICLE 6A. COMPETENCY AND CRIMINAL RESPONSIBILITY OF PERSONS CHARGED OR CONVICTED OF A CRIME.

§27-6A-1. Qualified forensic evaluator; qualified forensic psychiatrist; qualified forensic psychologist; definitions and requirements.
(a) For purposes of this article:

(1) A "qualified forensic psychiatrist" is:

(A) A psychiatrist licensed under the laws in this state to practice medicine who has completed post-graduate education in psychiatry in a program accredited by the Accreditation Council of Graduate Medical Education; and

(B) Board eligible or board certified in forensic psychiatry by the American Board of Psychiatry and Neurology or actively enrolled in good standing in a West Virginia training program accredited by the Accreditation Council of Graduate Medical Education to make the evaluator eligible for board certification by the American Board of Psychiatry and Neurology in forensic psychiatry or has two years of experience in completing court-ordered forensic criminal evaluations, including having been qualified as an expert witness by a West Virginia circuit court. (2) A "qualified forensic psychologist" is:

(A) A licensed psychologist licensed under the laws of this state to practice psychology; and

(B) Board eligible or board certified in forensic psychology by the American Board of Professional Psychology or actively enrolled in good standing in a West Virginia training program approved by the American Board of Forensic Psychology to make the evaluator eligible for board certification in forensic psychology or has at least two years of experience in performing court-ordered forensic criminal evaluations, including having been qualified as an expert witness by a West Virginia circuit court. (2) A "qualified forensic evaluator" is either a qualified forensic psychiatrist or a qualified forensic psychologist as defined in this section.

(3) "Department" means the Department of Health and Human Resources.

(b) No qualified forensic evaluator may perform a forensic evaluation on an individual under this chapter if the qualified forensic evaluator has been the individual's treating psychologist or psychiatrist within one year prior to any evaluation order.
§27-6A-2. Competency of defendant to stand trial; cause for appointment of qualified forensic evaluator; written report; observation period.

(a) Whenever a court of record has reasonable cause to believe that a defendant in which an indictment has been returned, or a warrant or summons issued, may be incompetent to stand trial it shall, sua sponte or upon motion filed by the state or by or on behalf of the defendant, at any stage of the proceedings order a forensic evaluation of the defendant's competency to stand trial to be conducted by one or more qualified forensic psychiatrists, or one or more qualified forensic psychologists. If a court of record or other judicial officer orders both a competency evaluation and a criminal responsibility or diminished capacity evaluation, the competency evaluation shall be performed first, and if a qualified forensic evaluator is of the opinion that a defendant is not competent to stand trial, no criminal responsibility or diminished capacity evaluation may be conducted without further order of the court. The initial forensic evaluation may not be conducted at a state inpatient mental health facility unless the defendant resides there.

(b) The court shall require the party making the motion for the evaluation, and other parties as the court considers appropriate, to provide to the qualified forensic evaluator appointed under subsection (a) of this section any information relevant to the evaluations within ten business days of its evaluation order. The information shall include, but not be limited to:

1. A copy of the warrant or indictment;

2. Information pertaining to the alleged crime, including statements by the defendant made to the police, investigative reports and transcripts of preliminary hearings, if any;

3. Any available psychiatric, psychological, medical or social records that are considered relevant;

4. A copy of the defendant's criminal record; and

5. If the evaluations are to include a diminished capacity assessment, the nature of any lesser included criminal offenses.

(c) A qualified forensic evaluator shall schedule and arrange for the prompt completion of any court-ordered evaluation which may include record review and defendant interview and shall, within ten business days of the date of the completion of any evaluation, provide to the court of record a written, signed report of his or her opinion on the issue of competency to stand trial. If it is the qualified forensic evaluator's opinion that the defendant is not competent to stand trial, the report shall state whether the defendant is substantially likely to attain competency within the next three months and, in order to attain competency to stand trial, whether the defendant requires inpatient management in a mental health facility. The court may extend the ten-day period for filing the report if a qualified forensic evaluator shows good cause to extend the period, but in no event may the period exceed thirty days. If there are no objections by the state or defense counsel, the court may, by order, dismiss the requirement for a written report if the qualified forensic evaluator's opinion may otherwise be made known to the court and interested parties.
(d) If the court determines that the defendant has been uncooperative during the forensic evaluation ordered pursuant to subsection (a) of this section or there have been one or more inadequate or conflicting forensic evaluations performed pursuant to subsection (a) of this section and the court has reason to believe that an observation period is necessary in order to determine if a person is competent to stand trial, the court may order the defendant be committed to a mental health facility designated by the department for a period not to exceed fifteen days and an additional evaluation be conducted in accordance with subsection (a) of this section by one or more qualified forensic psychiatrists, or a qualified forensic psychiatrist and a qualified forensic psychologist. The court shall order that at the conclusion of the fifteen-day observation period the sheriff of the county where the defendant was charged shall take immediate custody of the defendant for transportation and disposition as ordered by the court.

(e) A mental health facility not operated by the state is not obligated to admit and treat a defendant under this section.

§27-6A-3. Competency of defendant to stand trial determination; preliminary finding; hearing; evidence; disposition.

(a) Within five days of the receipt of the qualified forensic evaluator's report and opinion on the issue of competency to stand trial, the court of record shall make a preliminary finding on the issue of whether the defendant is competent to stand trial and if not competent whether there is a substantial likelihood that the defendant will attain competency within the next three months. If the court of record orders, or if the state or defendant or defendant's counsel within twenty days of receipt of the preliminary findings requests, a hearing, then a hearing shall be held by the court of record within fifteen days of the date of the preliminary finding, absent good cause being shown for a continuance. If a hearing order or request is not filed within twenty days, the preliminary findings of the court become the final order.

(b) At a hearing to determine a defendant's competency to stand trial the defendant has the right to be present and he or she has the right to be represented by counsel and introduce evidence and cross-examine witnesses. The defendant shall be afforded timely and adequate notice of the issues at the hearing and shall have access to all forensic evaluator's opinions. All rights generally afforded a defendant in criminal proceedings shall be afforded to a defendant in the competency proceedings, except trial by jury.

(c) The court of record pursuant to a preliminary finding or hearing on the issue of a defendant's competency to stand trial and with due consideration of any forensic evaluation conducted pursuant to sections two and three of this article shall make a finding of fact upon a preponderance of the evidence as to the defendant's competency to stand trial based on whether or not the defendant has sufficient present ability to consult with his or her lawyer with a reasonable degree of rational understanding and whether he or she has a rational as well as a factual understanding of the proceedings against him or her.

(d) If at any point in the proceedings the defendant is found competent to stand trial, the court of record shall forthwith proceed with the criminal proceedings.
(e) If at any point in the proceedings the defendant is found not competent to stand trial, the court of record shall at the same hearing, upon the evidence, make further findings as to whether or not there is a substantial likelihood that the defendant will attain competency within the next ensuing three months.

(f) If at any point in the proceedings the defendant is found not competent to stand trial and is found substantially likely to attain competency, the court of record shall in the same order, upon the evidence, make further findings as to whether the defendant requires, in order to attain competency, inpatient management in a mental health facility. If inpatient management is required, the court shall order the defendant be committed to an inpatient mental health facility designated by the department to attain competency to stand trial and for a competency evaluation. The term of this commitment may not exceed three months from the time of entry into the facility. However, upon request by the chief medical officer of the mental health facility and based on the requirement for additional management to attain competency to stand trial, the court of record may, prior to the termination of the three-month period, extend the period up to nine months from entry into the facility. A forensic evaluation of competency to stand trial shall be conducted by a qualified forensic evaluator and a report rendered to the court, in like manner as subsections (a) and (c), section two of this article, every three months until the court determines the defendant is not competent to stand trial and is not substantially likely to attain competency.

(g) If at any point in the proceedings the defendant is found not competent to stand trial and is found not substantially likely to attain competency and if the defendant has been indicted or charged with a misdemeanor or felony which does not involve an act of violence against a person, the criminal charges shall be dismissed. The dismissal order may, however, be stayed for twenty days to allow civil commitment proceedings to be instituted by the prosecutor pursuant to article five of this chapter. The defendant shall be immediately released from any inpatient facility unless civilly committed.

(h) If at any point in the proceedings the defendant is found not competent to stand trial and is found not substantially likely to attain competency, and if the defendant has been indicted or charged with a misdemeanor or felony in which the misdemeanor or felony does involve an act of violence against a person, then the court shall determine on the record the offense or offenses of which the person otherwise would have been convicted, and the maximum sentence he or she could have received. A defendant shall remain under the court's jurisdiction until the expiration of the maximum sentence unless the defendant attains competency to stand trial and the criminal charges reach resolution or the court dismisses the indictment or charge. The court shall order the defendant be committed to a mental health facility designated by the department that is the least restrictive environment to manage the defendant and that will allow for the protection of the public. Notice of the maximum sentence period with an end date shall be provided to the mental health facility. The court shall order a qualified forensic evaluator to conduct a dangerousness evaluation to include dangerousness risk factors to be completed within thirty days of admission to the mental health facility and a report rendered to the court within ten business days of the completion of the evaluation. The medical director of the mental health facility shall provide the court a written clinical summary report of the defendant's condition at least annually during the time of the court's jurisdiction. The court's jurisdiction shall continue an additional ten days beyond any expiration to allow
civil commitment proceedings to be instituted by the prosecutor pursuant to article five of this chapter. The defendant shall then be immediately released from the facility unless civilly committed.

(i) If the defendant has been ordered to a mental health facility pursuant to subsection (h) of this section and the court receives notice from the medical director or other responsible official of the mental health facility that the defendant no longer constitutes a significant danger to self or others, the court shall conduct a hearing within thirty days to consider evidence, with due consideration of the qualified forensic evaluator's dangerousness report or clinical summary report to determine if the defendant shall be released to a less restrictive environment. The court may order the release of the defendant only when the court finds that the defendant is no longer a significant danger to self or others. When a defendant's dangerousness risk factors associated with mental illness are reduced or eliminated as a result of any treatment, the court, in its discretion, may make the continuance of appropriate treatment, including medications, a condition of the defendant's release from inpatient hospitalization. The court shall maintain jurisdiction of the defendant in accordance with said subsection. Upon notice that a defendant ordered to a mental health facility pursuant to said subsection who is released on the condition that he or she continues treatment does not continue his or her treatment, the prosecuting attorney shall, by motion, cause the court to reconsider the defendant's release. Upon a showing that defendant is in violation of the conditions of his or her release, the court shall reorder the defendant to a mental health facility under the authority of the department which is the least restrictive setting that will allow for the protection of the public.

(j) The prosecuting attorney may, by motion, and in due consideration of any chief medical officer's or forensic evaluator's reports, cause the competency to stand trial of a defendant subject to the court's jurisdiction pursuant to subsection (h) of this section or released pursuant to subsection (i) of this section to be determined by the court of record while the defendant remains under the jurisdiction of the court, and in which case the court may order a forensic evaluation of competency to stand trial be conducted by a qualified forensic evaluator and a report rendered to the court in like manner as subsections (a) and (c), section two of this article.

(k) Any defendant found not competent to stand trial may at any time petition the court of record for a hearing on his or her competency.

(l) Notice of court findings of a defendant's competency to stand trial, of commitment for inpatient management to attain competency, of dismissal of charges, of order for inpatient management to protect the public, of release or conditional release, or any hearings to be conducted pursuant to this section shall be sent to the prosecuting attorney, the defendant and his or her counsel, and the mental health facility. Notice of court release hearing or order for release or conditional release pursuant to subsection (i) of this section shall be made available to the victim or next of kin of the victim of the offense for which the defendant was charged. The burden is on the victim or next of kin of the victim to keep the court apprised of that person's current mailing address.

(m) A mental health facility not operated by the state is not obligated to admit or treat a defendant under this section.
§27-6A-4. Criminal responsibility or diminished capacity evaluation; court jurisdiction over persons found not guilty by reason of mental illness.

(a) If the court of record finds, upon hearing evidence or representations of counsel for the defendant, that there is probable cause to believe that the defendant's criminal responsibility or diminished capacity will be a significant factor in his or her defense, the court shall appoint one or more qualified forensic psychiatrists or qualified forensic psychologists to conduct a forensic evaluation of the defendant's state of mind at the time of the alleged offense. However, if a qualified forensic evaluator is of the opinion that the defendant is not competent to stand trial that no criminal responsibility or diminished capacity evaluation may be conducted. The forensic evaluation may not be conducted at a state inpatient mental health facility unless the defendant has been ordered to a mental health facility in accordance with subsection (c), section two of this article or subsection (f) or (h), section three of this article. To the extent possible, qualified forensic evaluators who have conducted evaluations of competency under subsection (a), section two of this chapter shall be used to evaluate criminal responsibility or diminished capacity under this subsection.

(b) The court shall require the party making the motion for the evaluations, and other parties as the court considers appropriate, to provide to the qualified forensic evaluator appointed under subsection (a) of this section any information relevant to the evaluation within ten business days of its evaluation order. The information shall include, but not be limited to:

1. A copy of the warrant or indictment;
2. Information pertaining to the alleged crime, including statements by the defendant made to the police, investigative reports and transcripts of preliminary hearings, if any;
3. Any available psychiatric, psychological, medical or social records that are considered relevant;
4. A copy of the defendant's criminal record; and
5. If the evaluation is to include a diminished capacity assessment, the nature of any lesser criminal offenses.

(c) A qualified forensic evaluator shall schedule and arrange within fifteen days of the receipt of appropriate documents the completion of any court-ordered evaluation which may include record review and defendant interview and shall, within ten business days of the date of the completion of any evaluation, provide to the court of record a written, signed report of his or her opinion on the issue of criminal responsibility and if ordered, on diminished capacity. The court may extend the ten-day period for filing the report if a qualified forensic evaluator shows good cause to extend the period, but in no event may the period exceed thirty days. If there are no objections by the state or defense counsel, the court may, by order, dismiss the requirement for a written report if the qualified forensic evaluator's opinion may otherwise be made known to the court and interested parties.
(d) If the court determines that the defendant has been uncooperative during a forensic evaluation ordered pursuant to subsection (a) of this section or there are inadequate or conflicting forensic evaluations performed pursuant to subsection (a) of this section, and the court has reason to believe that an observation period and additional forensic evaluation or evaluations are necessary in order to determine if a defendant was criminally responsible or with diminished capacity, the court may order the defendant be admitted to a mental health facility designated by the department for a period not to exceed fifteen days and an additional evaluation be conducted and a report rendered in like manner as subsections (a) and (b) of this section by one or more qualified forensic psychiatrists or one or more qualified forensic psychologists. At the conclusion of the observation period, the court shall enter a disposition order and the sheriff of the county where the defendant was charged shall take immediate custody of the defendant for transportation and disposition as ordered by the court.

(e) If the verdict in a criminal trial is a judgment of not guilty by reason of mental illness, the court shall determine on the record the offense or offenses of which the acquitee could have otherwise been convicted, and the maximum sentence he or she could have received. The acquitee shall remain under the court's jurisdiction until the expiration of the maximum sentence or until discharged by the court. The court shall commit the acquitee to a mental health facility designated by the department that is the least restrictive environment to manage the acquitee and that will allow for the protection of the public. Notice of the maximum sentence period with end date shall be provided to the mental health facility. The court shall order a qualified forensic evaluator to conduct a dangerousness evaluation to include dangerousness risk factors to be completed within thirty days of admission to the mental health facility and a report rendered to the court within ten business days of the completion of the evaluation. The medical director of the mental health facility shall provide the court a written clinical summary report of the defendant's condition at least annually during the time of the court's jurisdiction. The court's jurisdiction continues an additional ten days beyond any expiration to allow civil commitment proceedings to be instituted by the prosecutor pursuant to article five of this chapter. The defendant shall then be immediately released from the facility unless civilly committed.

(f) In addition to any court-ordered evaluations completed pursuant to section two, three or four of this article, the defendant or the state has the right to an evaluation or evaluations by a forensic evaluator or evaluators of his or her choice and at his or her expense.

(g) A mental health facility not operated by the state is not required to admit or treat a defendant or acquitee under this section.

§27-6A-5. Release of acquitee to less restrictive environment; discharge from jurisdiction of the court.
(a) If, at any time prior to the expiration of the court's jurisdiction, the chief medical officer or responsible official of the mental health facility to which an acquitee has been ordered pursuant to subsection (e), section four of this article believes that the acquitee is not mentally ill or does not have significant dangerousness risk factors associated with mental illness, he or she shall file with the court of record notice of the belief and shall submit evidence in support of the belief to include a forensic evaluation dangerousness report conducted in like manner as said subsection and recommendations for treatment,
including medications, that reduce or eliminate the dangerousness risk factors associated with mental illness. The court of record shall hold a hearing within thirty days of receipt of the notice to consider evidence as to whether the acquitee shall be released from the mental health facility to a less restrictive environment. Notice of the hearing shall be made available to the prosecuting attorney responsible for the charges brought against the acquitee at trial, the acquitee and his or her counsel and the mental health facility. If upon consideration of the evidence the court determines that an acquitee may be released from a mental health facility to a less restrictive setting, the court shall order, within fifteen days of the hearing, the acquitee be released upon terms and conditions, if any, the court considers appropriate for the safety of the community and the well-being of the acquitee. Any terms and conditions imposed by the court must be protective and therapeutic in nature, not punitive. When a defendant's dangerousness risk factors associated with mental illness are reduced or eliminated as a result of any treatment, the court, in its discretion, may make the continuance of appropriate treatment, including medications, a condition of the defendant's release from inpatient hospitalization. The court shall maintain jurisdiction of the defendant in accordance with said subsection. Upon notice that an acquitee released on the condition that he or she continues appropriate treatment does not continue his or her treatment, the prosecuting attorney responsible for the charges brought against the acquitee at trial shall, by motion, cause the court to reconsider the acquitee's release and upon a showing that the acquitee is in violation of the conditions of his or her release, the court may reorder the acquitee to a mental health facility designated by the department which is the least restrictive setting appropriate to manage the acquitee and protect the public.

(b) No later than thirty days prior to the release from a mental health facility or other management setting of an acquitee because of the expiration of the court's jurisdiction as set in accordance with subsection (e), section four of this article, if the acquitee's physician, psychologist, chief medical officer or other responsible party is of the opinion that the acquitee's mental illness renders the acquitee to be likely to cause serious harm to self or others, the supervising physician, psychologist, chief medical officer or other responsible party shall notify the court of record who shall promptly notify the prosecuting attorney in the county of the court having jurisdiction of the opinion and the basis for the opinion. Following notification, the prosecuting attorney may file, within ten days, a civil commitment application against the acquitee pursuant to article five of this chapter.

§27-6A-6. Judicial hearing of defendant's defense other than not guilty by reason of mental illness.
If a defendant who has been found to be not competent to stand trial believes that he or she can establish a defense of not guilty to the charges pending against him or her, other than the defense of not guilty by reason of mental illness, the defendant may request an opportunity to offer a defense thereto on the merits before the court which has criminal jurisdiction. If the defendant is unable to obtain legal counsel, the court of record shall appoint counsel for the defendant to assist him or her in supporting the request by affidavit or other evidence. If the court of record in its discretion grants such a request, the evidence of the defendant and of the state shall be heard by the court of record sitting without a jury. If after hearing such petition the court of record finds insufficient evidence to support a conviction, it shall dismiss the indictment and order the release of the defendant from criminal custody. The release order, however, may be stayed for ten days to allow civil commitment proceedings to be instituted by the prosecutor pursuant to article five of this chapter: Provided, That a defendant committed to a mental health facility pursuant to
subsection (f) or (h), section three of this article shall be immediately released from the facility unless
civilly committed.

Notwithstanding any finding of incompetence to stand trial under the provisions of this article, the court
of record may at any stage of the criminal proceedings allow a defendant to be released with or without
bail.

§27-6A-8. Credit for time; expenses.
(a) If a person is convicted of a crime, any time spent in involuntary confinement in a mental health
facility as a result of being charged with the crime shall be credited to the sentence.

(b) All inpatient care and treatment shall be paid by the department.

§27-6A-9. Competency to be adjudicated in juvenile court.
In a similar manner and in accordance with procedures set forth in subsection (a), section two of this
article or subsection (a), section four of this article, a juvenile court may order a qualified forensic
evaluator to conduct an evaluation of a juvenile to aid the court in its disposition under chapter forty
nine
of this code. In a similar manner and in accordance with procedures set forth in subsection (d), section
two of this article or subsection (d), section four of this article, a juvenile court may order a period of
observation for an alleged delinquent or neglected juvenile at a mental health facility designated by the
department to aid the court in its disposition. The period of observation may not exceed fifteen days.

§27-6A-10. Medications and management of court-ordered individuals.
(a) At any time pursuant to section two, three or four of this article an individual is court ordered to a
mental health facility, the individual has the right to receive treatment under the standards of medical
management.

(b) An individual with health care decision-making capacity may refuse medications or other
management unless court-ordered to be treated or unless a treating clinician determines that medication or
other management is necessary in emergencies or to prevent danger to the individual or others.

§27-6A-11. Payment to forensic evaluators.
The department shall pay qualified forensic evaluators for all matters related to conducting a court-
ordered forensic evaluation. The department shall develop and implement a process for prompt payment
to qualified forensic evaluators. The department shall establish policies and procedures for establishing a
maximum rate schedule for each of the four evaluation types (competency to stand trial, criminal
responsibility, diminished capacity, dangerousness) to include all efforts towards the completion of each
evaluation such as scheduling and administrative tasks, record review, psychological and other testing,
interviews, report writing, research, preparation and consultation. Such policies and procedures shall
include input from provider representatives as necessary and appropriate. Any rate schedule shall be fair
and reasonable. The department shall consider requests for payment in excess of established rates or other
expenses for good cause shown.
Appendix B

Procedure for Questioning, Evaluating, and Adjudicating Competence to Stand Trial

Charge

Selection/ Appointment of Defense Counsel

CST Questioned

CST Evaluation Ordered

Defendant Found Incompetent

Restoration Period Ordered

Competency Re-Assessed

Defendant Found IST-R

Defendant Found CST

Defendant Found IST-Non-Restorable

Defendant Held Under Court Jurisdiction

Charges Dismissed

CST Not Questioned

Request for CST Evaluation Denied

Defendant Found Competent

Adjudication of Charge(s)
Appendix C

Competency Restoration Group Protocol

IST-R Group 1: List of Modules

Introduction: “What does ‘Competency’ Mean?”

Module 1: Appreciation of Charges

Module 2: Appreciation of Possible Penalties, Planning of Legal Strategy, and Likely Outcome

Module 3: Understanding the Legal Process

Module 4: Capacity to Disclose to Attorney

Module 5: Ability to Manifest Appropriate Courtroom Behavior

Module 6: Capacity to Testify Relevantly

IST-R Group 2: List of Modules

Module 1: How did you get to (the) Hospital?

Module 2: What is “IST-R?”

Module 3: What does it mean to be “Competent”?

Module 4: How can you Plead Once You Have Been Found Competent?

Module 5: What is a “Plea Bargain?”

Module 6: What is the Difference Between a Felony and a Misdemeanor?

Module 7: What are Your Charges and what do They Mean?

Module 8: What are the Roles of the People in the Courtroom?

Module 9: What is Your Role in the Courtroom?

Module 10: What is Appropriate Behavior in the Courtroom?

Module 11: What does the Phrase “Know what you are Saying when Your Mouth Isn’t Moving” Mean?

Module 12: Why is it Important to Know what Medications You Take?

Module 13: What is a Competency Evaluation?

Module 14: What Happens After your Competency Evaluation?
IST-R Group 3: List of Modules

Module 1: “Oh boy, I’m in trouble” (e.g., definitions of felonies, misdemeanors)

Module 2: Let Your Attorney Know What Happened (i.e., what a defendant should tell his attorney)

Module 3: How do you get Along With Your Attorney? (i.e., what a defendant should know about his attorney)

Module 4: “What should I do?” (e.g., definitions of “facts,” “evidence,” standards of evidence, etc.)

Module 5: How Might This All Turn Out? (i.e., potential outcomes of charges and IST-R status)

Module 6: “Am I going to jail?” (i.e., types of court jurisdiction under which the defendant might be placed)

Module 7: “What does everyone do?” (i.e., roles of individuals in the courtroom)

Module 8: The Rules of a Trial (i.e., standard court procedures)

Module 9: “How do I behave?” (i.e., appropriate defendant behavior while in courtroom)

Module 10: Can You Get on the Stand and Tell Your Story? (i.e., considerations regarding the decision to testify)

Module 11: “That’s a lie!” (i.e., appropriate defendant response to witnesses against him)

Module 12: “Let’s make a deal” (i.e., importance and types of trial strategy)

Module 13: “I deserve to be punished” (i.e., What is a “plea bargain”?)
Appendix D

Legal Charges Represented in Sample: Felonies

<table>
<thead>
<tr>
<th>Person</th>
<th>Sex</th>
<th>Property</th>
<th>Miscellaneous</th>
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<tbody>
<tr>
<td>Robbery-1(^{\text{st}}) Deg. (5)*</td>
<td>Sexual Assault-1(^{\text{st}}) Deg. (3)</td>
<td>Forgery (1)</td>
<td>Failure to Provide Info. to Sex Offender Registry (9)</td>
</tr>
<tr>
<td>Murder-2(^{\text{nd}}) Deg. (1)</td>
<td>Sexual Abuse-1(^{\text{st}}) Deg. (6)</td>
<td>Uttering (2)</td>
<td>Probation Violation (1)</td>
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<tr>
<td>Battery on Police Officer (4)</td>
<td>Sexual Assault-2(^{\text{nd}}) Deg. (3)</td>
<td>Breaking &amp; Entering (1)</td>
<td>Intimidation and Retaliation of a Public Officer (1)</td>
</tr>
<tr>
<td>Wanton Endangerment (6)</td>
<td>Incest (1)</td>
<td>Arson-1(^{\text{st}}) Deg. (3)</td>
<td>Threatening to Commit Terrorist Act (2)</td>
</tr>
<tr>
<td>Assault on Police Officer (4)</td>
<td>Sexual Assault-3(^{\text{rd}}) Deg. (6)</td>
<td>Grand Larceny (3)</td>
<td>Driving Under the Influence (1)</td>
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<td>Malicious Wounding (2)</td>
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<td>Arson-3(^{\text{rd}}) Deg. (2)</td>
<td>Driving while Revoked (1)</td>
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<tr>
<td>Kidnapping (1)</td>
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<td>Receiving/Transferring Stolen Goods (1)</td>
<td>Possession of Firearm (1)</td>
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<td>Malicious Assault (2)</td>
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<td>Delivery of Controlled Substance (2)</td>
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<td>Attempted Murder (4)</td>
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<td>Conspiracy to Deliver Controlled Substance (1)</td>
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<td>Malicious Killing of Animal (1)</td>
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<td>Attempted Robbery (1)</td>
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<tr>
<td>Murder-1(^{\text{st}}) Deg. (1)</td>
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*Note. Coding based on West Virginia Gen. Laws ch. 61 (2007)  
*Note. *Number patients with each charge. Charges: Felonies \(n=89\), Misdemeanors \(n=57\), Unknown \(n=4\), Total \(n=150\)
Appendix E

Legal Charges Represented in Sample: Misdemeanors

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<thead>
<tr>
<th>Person</th>
<th>Property</th>
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<tbody>
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<td>Attempted Malicious Assault (1)*</td>
<td>Burglary (4)</td>
<td>Brandishing (2)</td>
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<tr>
<td>Domestic Assault (4)</td>
<td>Breaking &amp; Entering of Non-Residence (1)</td>
<td>Disorderly Conduct (3)</td>
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<td>Assault (3)</td>
<td>Petit Larceny (5)</td>
<td>Obstructing an Officer (8)</td>
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<tr>
<td>Battery (1)</td>
<td>Destruction of Property (6)</td>
<td>Fleeing (2)</td>
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<td>Stalking (1)</td>
<td>Fraudulent Schemes (2)</td>
<td>Traffic Violations (1)</td>
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<td>Domestic Battery (3)</td>
<td>Attempted Burglary (1)</td>
<td>Failure to Stop for Police Cruiser (1)</td>
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<td>Destruction of Parked Vehicles (1)</td>
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<td>Failure to Appear (1)</td>
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<td>Improper Car Registration (1)</td>
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<td>Driving on Suspended License (1)</td>
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<tr>
<td></td>
<td></td>
<td>Failure to Pay Child Support (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trespassing (1)</td>
</tr>
</tbody>
</table>

Note. Coding based on West Virginia Gen. Laws ch. 61 (2007)

Note. *Number patients with each charge. Charges: Felonies n=89, Misdemeanors n=57, Unknown n=4, Total n=150
Appendix F

Demographic, Clinical, and Legal Variables Collected From Patient Charts

<table>
<thead>
<tr>
<th>Variable</th>
<th>Data Type</th>
<th>Categories/ Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Continuous</td>
<td>Age in Years</td>
</tr>
<tr>
<td>Race</td>
<td>Categorical, Dichotomous</td>
<td>White/ Black</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Categorical</td>
<td>Single/ Married/ Divorced</td>
</tr>
<tr>
<td>Education</td>
<td>Continuous</td>
<td>Years of Education</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Thought Disorder</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>History of Inpatient Treatment</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>History of Outpatient Treatment</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Antipsychotic Use</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Antidepressant Use</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Mood Stabilizer Use</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>CST Restoration Group Sessions</td>
<td>Continuous</td>
<td>Number of group sessions attended</td>
</tr>
<tr>
<td>Admit GAF</td>
<td>Continuous</td>
<td>Numeric GAF Score</td>
</tr>
<tr>
<td>M-FAST</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No (Surpassed Clinical Cutoff)</td>
</tr>
<tr>
<td>SIMS</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No (Surpassed Clinical Cutoff)</td>
</tr>
<tr>
<td>ADI Random</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No (Surpassed Clinical Cutoff)</td>
</tr>
<tr>
<td>ADI Malingering</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No (Surpassed Clinical Cutoff)</td>
</tr>
<tr>
<td>ADI Reliability</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No (Surpassed Clinical Cutoff)</td>
</tr>
<tr>
<td>Charge: Crime against Person</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Charge: Sex Crime</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Charge: Property Crime</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Charge: Miscellaneous</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Felony Charge</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
<tr>
<td>Legal History</td>
<td>Categorical, Dichotomous</td>
<td>Yes/ No</td>
</tr>
</tbody>
</table>
Table 1

**Comparison of Non-Restorable and Restored Patients: Demographic Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Incompetent—NR</th>
<th>Restored to CST</th>
<th>Total Sample</th>
<th>% of DV Group</th>
<th>p^c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>23</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21</td>
<td>44</td>
<td>81.3</td>
<td>32.3</td>
<td>NS</td>
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<td>Black</td>
<td>2</td>
<td>13</td>
<td>18.8</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>Marital</td>
<td>23</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>13</td>
<td>68.3</td>
<td>51.9</td>
<td>31.7</td>
<td>NS</td>
</tr>
<tr>
<td>Married</td>
<td>7</td>
<td>10</td>
<td>21.5</td>
<td>41.2</td>
<td></td>
</tr>
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<td>Divorced</td>
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<td>18</td>
<td>26.6</td>
<td>14.3</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>19</td>
<td>51</td>
<td></td>
<td>m=10.37 (2.67)</td>
<td>NS</td>
</tr>
<tr>
<td>Age</td>
<td>23</td>
<td>57</td>
<td></td>
<td>m=42.04 (12.67)</td>
<td>NS</td>
</tr>
</tbody>
</table>

*Note.* Total N values < 80 are due to missing data.

^a Percent of characteristic (e.g., White) represented within each experimental group (i.e., IST-NR and CST).

^b Percent represented by characteristic within combined sample of IST-NR and CST.

^c Significance values based on Fisher’s Exact Test for categorical variables and Independent Samples t-tests for continuous variables.
Table 2

Comparison of Non-Restorable and Restored Patients: Clinical Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Incompetent—NR</th>
<th>Restored to CST</th>
<th>Total Sample</th>
<th>(χ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bipolar disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>53</td>
<td>74.6</td>
<td>88.8</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>4</td>
<td>44.4</td>
<td>11.3</td>
</tr>
<tr>
<td>MR</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>53</td>
<td>74.6</td>
<td>88.8</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>4</td>
<td>44.4</td>
<td>11.3</td>
</tr>
<tr>
<td>Thought disorder</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>30</td>
<td>71.4</td>
<td>52.5</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>27</td>
<td>71.1</td>
<td>47.5</td>
</tr>
<tr>
<td>Inpatient Tx</td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>11</td>
<td>64.7</td>
<td>21.5</td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td>45</td>
<td>72.6</td>
<td>78.5</td>
</tr>
<tr>
<td>Outpatient Tx</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>11</td>
<td>50.0</td>
<td>27.8</td>
</tr>
<tr>
<td>Yes</td>
<td>12</td>
<td>45</td>
<td>78.9</td>
<td>72.2</td>
</tr>
<tr>
<td>Antipsychotic</td>
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<tr>
<td>No</td>
<td>7</td>
<td>20</td>
<td>74.1</td>
<td>34.6</td>
</tr>
<tr>
<td>Yes</td>
<td>16</td>
<td>35</td>
<td>68.6</td>
<td>65.4</td>
</tr>
<tr>
<td>Antidepressant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>31</td>
<td>66.0</td>
<td>60.3</td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>24</td>
<td>77.4</td>
<td>39.7</td>
</tr>
<tr>
<td>Mood Stabilizer</td>
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<td></td>
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<tr>
<td>No</td>
<td>14</td>
<td>37</td>
<td>72.5</td>
<td>65.4</td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>18</td>
<td>66.7</td>
<td>34.6</td>
</tr>
<tr>
<td>Restoration Groups</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>m=10.04 (7.85)</td>
<td>m=9.60 (5.59)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAF</td>
<td>21</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>m=36.43 (13.43)</td>
<td>m=35.93 (15.07)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Total N values < 80 are due to missing data.

a Percent of characteristic (e.g., MR diagnosis) represented within each experimental group (i.e., IST-NR and CST).
b Percent represented by characteristic within combined sample of IST-NR and CST.
c Significance values based on Chi-squares for categorical variables and Independent Samples t-tests for continuous variables.
d Significance values based on Fisher’s Exact Test.
Table 3

Comparison of Non-Restorable and Restored Patients: M-Fast, SIMS, and ADI Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% of Predictor Group&lt;sup&gt;a&lt;/sup&gt;</th>
<th>n</th>
<th>% of Predictor Group&lt;sup&gt;a&lt;/sup&gt;</th>
<th>% of DV Group&lt;sup&gt;b&lt;/sup&gt;</th>
<th>p&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Incompetent-NR</td>
<td>Restored to CST</td>
<td>Total Sample</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-Fast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>6</td>
<td>12</td>
<td>25</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>18.8</td>
<td>13</td>
<td>66.7</td>
<td>52.9</td>
<td></td>
</tr>
<tr>
<td>SIMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>3</td>
<td>11</td>
<td>24</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>31.6</td>
<td>13</td>
<td>78.6</td>
<td>42.4</td>
<td></td>
</tr>
<tr>
<td>ADI Random</td>
<td>10</td>
<td>6</td>
<td>20</td>
<td>25</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>23.1</td>
<td>20</td>
<td>76.9</td>
<td>74.3</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>44.4</td>
<td>5</td>
<td>55.6</td>
<td>25.7</td>
<td></td>
</tr>
<tr>
<td>ADI Malingering</td>
<td>10</td>
<td>7</td>
<td>16</td>
<td>25</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>30.4</td>
<td>16</td>
<td>69.6</td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>25.0</td>
<td>9</td>
<td>75.0</td>
<td>34.3</td>
<td></td>
</tr>
<tr>
<td>ADI Reliability</td>
<td>10</td>
<td>5</td>
<td>22</td>
<td>25</td>
<td>.027</td>
<td></td>
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<td>22</td>
<td>81.5</td>
<td>77.1</td>
<td></td>
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<td>5</td>
<td>62.5</td>
<td>3</td>
<td>37.5</td>
<td>22.9</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total N values < 80 are due to missing data.

Note. Scores were considered “elevated” if they surpassed the clinical cut score described in the testing manual.

<sup>a</sup> Percent of characteristic (e.g., Elevated SIMS) represented within each experimental group (i.e., IST-NR and CST).

<sup>b</sup> Percent represented by characteristic within combined sample of IST-NR and CST.

<sup>c</sup> Significance values based on Fisher’s Exact Test.
### Table 4

**Comparison of Non-Restorable and Restored Patients: Legal Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% of Predictor Group&lt;sup&gt;a&lt;/sup&gt;</th>
<th>n</th>
<th>% of Predictor Group&lt;sup&gt;a&lt;/sup&gt;</th>
<th>% of DV Group&lt;sup&gt;b&lt;/sup&gt;</th>
<th>(χ²) &lt;sup&gt;c&lt;/sup&gt;</th>
<th>p&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Incompetent-NR</td>
<td></td>
<td>Restored to CST</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person Crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>32.6</td>
<td>29</td>
<td>67.4</td>
<td>53.8</td>
<td>NS</td>
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</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>24.3</td>
<td>28</td>
<td>75.7</td>
<td>46.3</td>
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<td></td>
</tr>
<tr>
<td>Sex Crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>25.4</td>
<td>50</td>
<td>74.6</td>
<td>83.8</td>
<td>NS</td>
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</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>46.2</td>
<td>7</td>
<td>53.8</td>
<td>16.3</td>
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<td></td>
</tr>
<tr>
<td>Property Crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>34.0</td>
<td>35</td>
<td>66.0</td>
<td>66.3</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>18.5</td>
<td>22</td>
<td>81.5</td>
<td>33.8</td>
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<tr>
<td>Misc. Crime</td>
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</tr>
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<td>15</td>
<td>30.6</td>
<td>34</td>
<td>69.4</td>
<td>61.3</td>
<td>NS</td>
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<tr>
<td>Yes</td>
<td>8</td>
<td>25.8</td>
<td>23</td>
<td>74.2</td>
<td>38.8</td>
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</tr>
<tr>
<td>Legal History</td>
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<td></td>
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<td></td>
</tr>
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<td>13</td>
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<td>26.6</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14</td>
<td>24.1</td>
<td>44</td>
<td>75.9</td>
<td>73.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felony Charge</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>27.8</td>
<td>13</td>
<td>72.2</td>
<td>22.5</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td>29.0</td>
<td>44</td>
<td>71.0</td>
<td>77.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Total N values < 80 are due to missing data.

<sup>a</sup> Percent of characteristic (e.g., legal history) represented within each experimental group (i.e., IST-NR and CST).

<sup>b</sup> Percent represented by characteristic within combined sample of IST-NR and CST.

<sup>c</sup> Significance based on Chi-square analysis.
Table 5

*Comparison of Non-Restorable and Restored Patients: Length of Hospital Stay*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Incompetent—NR</th>
<th>Restored to Competence</th>
<th>(t, d*)</th>
<th>(p^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days to Final CST Opinion</td>
<td>23  139.22 (86.71)</td>
<td>55  90.82 (52.10)</td>
<td>(-2.50, -0.68)</td>
<td>.019</td>
</tr>
<tr>
<td>Hospital Stay (Days)</td>
<td>19  204.79 (124.42)</td>
<td>57  105.16 (54.00)</td>
<td>(-3.89, -1.04)</td>
<td>.003</td>
</tr>
<tr>
<td>CST Opinion-Discharge (Days)</td>
<td>19  72.37 (76.31)</td>
<td>55  15.31 (15.93)</td>
<td>(-3.24, -1.04)</td>
<td>.004</td>
</tr>
<tr>
<td>No. CST Evaluations</td>
<td>23  1.39 (.66)</td>
<td>57  1.18 (.38)</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Total \(N\) values < 80 are due to missing data.

\(^a\) \(d\) refers to Cohen’s \(d\). See Cohen (1988).

\(^b\) Significance values are based on Independent Samples \(t\)-tests.
Table 6

Results of Logistic Regression

<table>
<thead>
<tr>
<th>Included</th>
<th>B (SE)</th>
<th>Wald</th>
<th>Lower</th>
<th>Exp(B)</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient Treatment**</td>
<td>1.40 (.55)</td>
<td>6.55</td>
<td>1.39</td>
<td>4.03</td>
<td>11.74</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.30 (.33)</td>
<td>15.92</td>
<td>.27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. χ²(1)=6.65, p=.01

** p≤.01