STANDARDIZATION OF THE ASSESSMENT OF
COMPETENCY TO STAND TRIAL

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

Karen L. Ustad, B.S.
Denton, Texas
August, 1994
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Evaluations of the Georgia Court Competency Test - Mississippi Version Revised (GCCT-MSH) and the Competency Screening Test (CST) have supported their use with pretrial defendants. The present study evaluated the efficacy of the measures with an inpatient population. Both measures were factor analyzed in an attempt to replicate previously identified factor structures. Neither factor structure was replicated however, a distinct factor structure was identified for the GCCT-MSH. In addition, the relationship between sociodemographic variables, clinical variables, current symptomatology, and competency status were evaluated using discriminant functions analyses. The results suggest that the best predictors of incompetency in this sample are a diagnosis of a psychotic disorder or a non-psychotic affective disorder and a low measured IQ. Current symptomatology, as measured by the SCL-90-R, was not an effective predictor of competency status in this sample.
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CHAPTER I

INTRODUCTION

As early as the 17th century, the courts recognized that a defendant must be competent to take part in legal proceedings (Winick, 1983). The competency to stand trial doctrine, originated by the English courts, began as a reaction against defendants who would not or could not speak. The law required all defendants to enter a plea regarding their charges prior to initiation of a formal hearing (Melton, Petrila, Poythress, & Slobogin, 1987). The courts also recognized that the adversarial nature of the legal process made it necessary for defendants to be able protect themselves against the charges. Since the presence of mental illness may render an individual incapable of such a task, a continuation of the trial was thought to be a miscarriage of justice and a violation of human rights (Frith’s Case, 1790, cited in Ogloff, Wallace, & Otto, 1991).

In the broadest sense, criminal competency is composed of multiple issues that may effect a defendant’s ability to proceed through the judicial process. Criminal competencies are legal constructs that serve to protect the rights of defendants by ensuring a fair trial (Roesch & Golding,
1987). They include but are not limited to competency to waive Miranda rights, competency to plead guilty, competency to stand trial, competency to waive counsel, competency to refuse an insanity defense, competency to be sentenced, and competency to be executed (Ogloff, et al., 1991). The most frequently adjudicated and most widely researched of these competencies is competency to stand trial (Gutheil & Applebaum, 1982).

Competency to stand trial is a legal doctrine that refers to the defendant's current functional abilities as they pertain to the adjudicatory process. The legal criteria of competency to stand trial was established by the United States Supreme Court in the case of Dusky v. United States (1960). With the exception of the Florida State Statute, which has established highly specific legal guidelines for competency determinations in accordance with Dusky (Fla. Rules of Crim. Proc., Rule 3.211), the legal definition has not been made explicit although state statutes typically follow some variation of the Dusky standard (Grisso, 1986; Lanyon, 1986; Melton, et al., 1987; Roesch, Ogloff, & Golding, 1993). In Dusky, the Court stated that a defendant will be considered competent to stand trial if he has "sufficient present ability to consult with his attorney with a reasonable degree of rational understanding" and displays "a rational as well as factual understanding of the proceedings against him" (p. 402).
Despite the ambiguous language of the standard, some core elements have been identified (Melton et al., 1987). First, competency to stand trial is not conceptually or legally equivalent to criminal responsibility. Competency to stand trial refers to an individual’s present ability to participate in the judicial process not to his or her mental state at the time of the offense. The former standard necessitates a present-orientated evaluation of abilities whereas the latter requires a retrospective evaluation of mental status.

Second, the standard requires that the defendant be capable of relating to his or her attorney and show an understanding of the criminal proceedings. The standard does not stipulate that the defendant has to be willing to participate, it only states that he or she must be functionally able to do so (American Bar Association, 1989).

Third, the standard states that the defendant must possess a "reasonable" degree of rational understanding of the criminal proceedings. As already mentioned, the Courts have not provided any specific guidelines for the application of the standard; thus, the meaning of "reasonable" is left open for interpretation. However, it appears clear that the level of comprehension need not be perfect (United States v. Charters, 1987; California v. Medina, 1992; United States v. Percy, 1985).
Fourth and finally, the standard does not equate incompetency with either the presence of mental illness nor the defendant's need for treatment (e.g., *Feuer v. United States*, 1962; *Swisher v. United States*, 1965; *United States v. Adams*, 1969; *Wieter v. Settle*, 1961). The presence of mental illness is only germane to the competency issue if the deficiency caused by the mental illness affects the defendant's understanding of the criminal proceedings and/or their ability to consult with counsel.

The issue of competency to stand trial may be raised by either the defence or prosecution or the Court at any point in the proceedings, if there is a significant doubt about the patient’s current functional abilities (Grisso, 1986; Rogers & Mitchell, 1991). The United States Supreme Court set the precedent for the issue in *Pate v. Robinson* (1966) and again in *Drope v. Missouri* (1975). In *Pate* the U.S. Supreme Court held that "a trial judge has a constitutional responsibility to act on circumstances that suggest that a defendant may not be competent to stand trial" (cited in Ogloff et al., 1991, p. 349). If the issue is not raised in situations where there is bona fide doubt, a mistrial can be levied on the grounds that the defendant's due process rights have been violated (Grisso, 1986; Melton et al., 1987; Ogloff et al., 1991).

Competency to stand trial is a legal concept that has no direct psychological or psychiatric meaning. The
decision regarding a defendant’s competency is ultimately a legal one that is decided by the courts. The role of the mental health professional is to conduct an evaluation of a defendant’s competency and to provide the court with a summary of its findings. The role is limited to the provision of information regarding the defendant’s relevant functional abilities and does not extend to information regarding the ultimate opinion (Grisso, 1986; Roesch & Golding, 1980). This limitation has recently been challenged on the basis that no meaningful distinction can be made between ultimate opinions and ordinary testimony (Rogers & Ewing, 1989). In essence, the arbitrary restrictions imposed on mental health professionals through the exclusion of ultimate opinions simply add to the confusion regarding the role of expert witness and the veracity of their conclusions (Rogers & Ewing, 1989).

Competency Evaluations

Assessment of legal competencies has typically involved the use of traditional assessment measures that were developed for the assessment of psychopathology, personality traits, and general intelligence (Grisso, 1986). Such measures are considered by both legal and mental health professionals to be inappropriate as they do not satisfy the needs of the court (Roesch & Golding, 1980). Specifically, the information gleaned from these instruments is typically not relevant to the functional abilities related to a
defendant's competency (Roesch, et al., 1993; Rogers, Gillis, McMain, & Dickens, 1988). Also, many researchers have suggested that recommendations based on traditional assessments have inadvertently aligned the competency construct with presence of psychosis or mental retardation (Grisso, 1986; Melton, et al., 1987; Roesch & Golding, 1980). As already mentioned, these factors alone do not equate with incompetency. Over the past two decades, there has been a movement toward the development of tools specific to the assessment of competency to stand trial and the standardization of these evaluations.

The first assessment instruments consisted of checklists that outlined the primary factors considered to be relevant to the competency construct (Bukatman, Foy, & DeGrazie, 1971; Robey, 1965). In the early 1970s, McGarry and coworkers (Laboratory of Community Psychiatry, 1974) analyzed the Dusky standard in an attempt to identify the fundamental elements of the competency construct. These elements provided the foundation for the development of two standardized measures of competency to stand trial: The Competency Screening Test (CST; Lipsitt, Lelos, & McGarry, 1971) and the Competency to Stand Trial Assessment Instrument (CAI; Laboratory of Community Psychiatry, 1974). Since this time, four additional psychological measures were developed, each addressing the competency issue from a slightly different perspective. These measures include: (a)
the Fitness Interview Test (FIT; Roesch, Webster, & Eaves, 1984), (b) the Interdisciplinary Fitness Interview (IFI; Golding, Roesch & Schreiber, 1984), (c) the Georgia Court Competency Test (GCCT; Wildman et al., 1978) and (d) the Computer Assisted Determination of Competency to Proceed (CAD-COMP; Barnard et al., 1991).

Preliminary investigations regarding the reliability and validity of the measures of competency to stand trial have been conducted. At present, however, several measures are still in the research stage of development, although the CST, GCCT, and CAI have undergone quite extensive evaluation (Golding, Roesch, & Schreiber, 1984; McDonald, Nussbaum, & Bagby, 1991; Nicholson & Kugler, 1991; Paramesh, 1987; Roesch, Jackson et al., 1984). The following section will provide information regarding the development and standardization of two of the most widely used competency screening measures, the GCCT and the CST.

**Competency Screening Measures**

**GCCT.** The Georgia Court Competency Test was developed at the Forensic Services Division of Central State Hospital in Macon, Georgia. The test was constructed to be used as a rapid, quantitative measure of the knowledge and skills required for competency to stand trial (Grisso, 1986). The test is administered orally by a trained examiner and is considered to be easily understood by defendants. Interestingly, the GCCT was developed out of
local need and was never intended for widespread application (Grisso, 1986).

The original version of the GCCT consists of 17 questions designed to address a defendants' knowledge and skill in four domains: (a) understanding of courtroom procedure, (b) knowledge of the current charge, (c) knowledge of the possible penalties, and (d) the ability to communicate rationally with an attorney (Nicholson, Briggs, & Robertson, 1988). Each item is weighted in accordance with general guidelines and is given a score that ranges from a value of one to a maximum value of eight depending on the item. These scores are then summed and multiplied by two to yield a total score out of 100 (Grisso, 1986). According to Wildman et al. (1978), a defendant with a total score less than 70 is classified as incompetent by the GCCT.

Since its development in 1978 the GCCT has undergone several modifications. Nicholson, Robertson, Johnson, and Jenson (1988) altered the original version by adding four questions (13, 14, 15, and 16) that were thought to provide additional information regarding the defendant's knowledge of courtroom procedures and their ability to assist an attorney. Modifications to the scoring system included changes in the weighting of particular items and the provision of more explicit scoring criteria (Nicholson, Briggs et al., 1988). The GCCT has once again been modified and now includes eight screening questions designed to
assess potential malingering. The new version is referred to as the GCCT-MSH (1992 Revision) and was used in the present study (refer to Appendix A).

Since its inception, the GCCT has been subject to evaluation regarding its reliability, validity, and scope of generalizability. Reliability data on the original GCCT and the GCCT-MSH appear to be promising (Bagby, Nicholson, Rogers & Nussbaum, 1990; Johnson & Mullett, 1987; Mullet & Johnson, 1984, see Nicholson & Johnson, 1991). The original validation study indicated that the GCCT had moderately high test-retest reliability and inter-rater reliability ($r = .79$; Wildman et al., 1978). More recent investigations have suggested that the reliability of the scale is somewhat higher than originally reported. For example, Mullett and Johnson (1984) obtained an inter-rater reliability of .96 (with the original GCCT) while Nicholson, Robertson et al., (1988) obtained a value of .95 using the GCCT-MSH.

The GCCT-MSH seems to have improved the classificatory accuracy of the measure as compared to the original GCCT. In two studies using the original version, the GCCT correctly predicted staff decisions in 78% (Wildman et al., 1978) and 81% of the cases (Mullett & Johnson, 1984). In contrast, Nicholson, Robertson et al. (1988), employing the GCCT-MSH, found the classificatory accuracy to be 82%; the GCCT-MSH incorrectly identified competent defendants as incompetent in 67.7% of the cases (i.e., false positives)
and identified incompetent as competent in 3.8% of the cases (i.e., false negatives) (Nicholson, Robertson et al., 1988). These results suggest that the test overestimates incompetency but misses few truly incompetent which is in accordance with its screening function.

Factor analysis of the original version of the GCCT identified a two factor structure (Wildman et al., 1978). The analysis involved grouping the 17 questions of the original GCCT into six categories and then factor analyzing the category scores. The first factor was labeled Legal Knowledge and the second was termed the Defendant’s Style of Responding. A recent investigation regarding the factor structure of the GCCT-MSH failed to replicate the original results but identified three factors of the GCCT-MSH: (a) General Legal Knowledge, (b) Courtroom Layout, and (c) Specific Legal Knowledge (Nicholson, Briggs, et al., 1988). These factors accounted for 49% of the total variance with all items loading above .35 on at least one of the factors. This factor structure has since been replicated suggesting that the GCCT-MSH may consist of three stable, independent factors (Bagby et al., 1992).

**CST.** The Competency Screening Test was developed as a screening instrument for the identification of potentially incompetent defendants. The screening instrument was developed as a companion to the more thorough Competency Assessment Instrument (CAI) and was designed to identify
defendants who required a more in depth evaluation (Lipsitt et al., 1971; McGarry & Curran, 1973).

The CST is a 22 item measure that utilizes a sentence completion format (refer to Appendix B). The defendant is presented with 22 sentence stems, each of which describes a hypothetical legal situation, and is required to complete each sentence stem with an appropriate response (Grisso, 1986; Nicholson, 1988). Each response is scored on a three-point scale ranging from zero to two: A two-point response is considered to be "appropriate" to the stem; a one point response is considered to be "somewhat inappropriate" but not far below the standard; and a zero point response is considered to be completely "inappropriate" to the sentence stem (Lipsitt et al., 1971). The scores for each of the items are summed to yield a total score out of 44. The authors suggested that individuals who obtain a score of 21 or less are to proceed for further evaluation regarding their competency to stand trial. The cutoff score was determined on the basis of a subjective judgement that "a qualitative difference in responses that appeared at about a score of 20" (Lipsitt et al., 1971, p. 106).

The CST has received much attention from the psycholegal community (i.e. Grisso, 1986; Nicholson, Briggs et al., 1988; Nicholson, Robertson et al., 1988; Roesch et al., 1993). Although some investigators have been critical of the measure (Brakel, 1974; Roesch & Golding, 1980), the
majority of research indicated that it is a useful screening device (see Nicholson, Robertson et al., 1988). Studies on the reliability of the CST have indicated that inter-rater reliability is good and is typically .93 or above (Lipsitt et al., 1971; Nicholson, Robertson et al., 1988; Randolph, Hicks, & Mason, 1982). However, inter-scorer agreement on individual items has not been evaluated, so the variability among items is not yet known (Rogers & Mitchell, 1991).

The classificatory accuracy of the CST ranges from 76.7% to 89.7% using a cutoff score of 20 or lower and the errors in prediction tend to be in the desired direction (Nottingham & Mattson, 1981; Roesch & Golding, 1980; Shatin & Brodsky, 1979). A review of eight studies indicated that the range of false negatives (individuals misclassified as competent) was 0% to 16.6% while that for false positives (individuals misclassified as incompetent) was 22.2% to 88.0% (Grisso, 1986). Similar results were obtained by Nicholson, Robertson et al. (1988) where the hit-rate was 71.2% and the false negative rate was 3.5%. Unfortunately, the CST seems to lack specificity resulting in a proportionately higher number of fit people being misclassified. In the latter study, Nicholson, Robertson et al. (1988) obtained a false positive rate of 76.1%.

Factor analytic studies of the CST suggest that the measure does not have a stable factor structure. Initial evaluation by Laboratory of Community Psychiatry (1971)
using a pretrial population indicated the presence of six factors: (a) the relationship of the defendant to the attorney in developing a defense, (b) understanding of court processes, (c) responsiveness and reaction to accusation and guilt, (d) a second factor for the understanding of the court processes, (e) trust and confidence in their lawyer, and (f) future orientation (Laboratory of Community Psychiatry, 1974). The authors attempted to replicate the initial findings using a "normal" sample but failed to show even a moderate degree consistency between the two analyses (Grisso, 1986). One hypothesis is that the failure to replicate may have been related to the status of the second sample as they were not being evaluated for competency. Two more recent studies (Bagby et al., 1992; Nicholson, Briggs et al., 1988) have also failed to replicate the factor structure reported in the original validation work. However, Nicholson and colleagues (1988) were able to identify three factors that together accounted for 28% of the variance. Interestingly, none of the three factors displayed a central theme and the authors felt that labeling these factors would be inappropriate. The factors were identified as CST factors A, B, and C.

One of the primary criticisms of the CST has been its scoring system (Grisso, 1986). Many investigators contend that the scoring involves the imposition of values on the defendant's responses (Brakel, 1974; Roesch & Golding,
1980). For example, on one item, "Jack felt that the Judge _____," responses such as "was right" or "was fair" would receive a score of 2 while responses such as "was too harsh" or "was wrong" would receive a score of zero. According to Roesch and Golding (1980), such negative responses may be accurate portrayals of the defendant's past experiences. According to Grisso (1986), the authors of the CST did not attempt to validate the scoring criteria with members in the legal arena or with mental health professionals outside the project's research team. Thus, the scoring system may be inappropriate for use with an offender population.

To date, the majority of research using the CST and the GCCT has focused on establishing the reliability and validity of these measures with a pretrial population. In general, the measures have demonstrated good reliability and validity and are considered valuable screening instruments for competency to stand trial. Perhaps one of the major drawbacks associated with these screening devices is their lack of specificity. The rate of false positives (misclassifying a competent defendant as incompetent) is typically above 60%. False positives are less concerning in regards to the defendant's welfare since the error results in further evaluation rather than a finding of competency. However, the lack of sensitivity is troublesome in terms of monetary cost and time in relation to the unnecessary evaluation of competent defendants.
Hart and Hare (1992) suggested that a fitness evaluation begin with a clinical screening for psychosis since very few non-psychotic individuals are found unfit. According to the authors, non-psychotic individuals could then be administered a brief competency screening instrument while those classified as psychotic and those who fail the screening, could be given a more intensive evaluation such as the CAI or FIT. This approach may help in terms of time but does little to reduce the rate of false positives. A potentially viable option would be the development of a screening battery that would maintain a low false negative rate (misclassifying incompetent defendants as competent) while substantially reducing the rate of false positives. In addition, research has not yet investigated the potential use of the GCCT-MSH or the CST in the assessment of competency during treatment. Establishing reliability and validity with inpatient populations would provide further support for the construct validity of the measures and may aid in the early identification of restored competency.

**Sociodemographic and Clinical Factors**

Many studies have focused on identifying the modal characteristics of defendants found incompetent to stand trial (Aubrey, 1988; Cuneo, Brelje, Randolph, & Taliana, 1982; Lamb, 1987; Siomopoulos, 1978; Steadman, 1979; Warren, Fitch, Dietz, & Rosenfeld, 1991). The results of such research has produced a patient profile that depicts an
individual who has few social and economic resources, a
history of psychiatric problems, and a tendency to commit
violent crime. Two recent studies have examined the
predictive power of certain demographic and clinical
characteristics as they relate to the competency construct.
Rogers et al., (1988) found no difference in the predictive
abilities of clinical variables (i.e., ICD-9 diagnosis, MMPI
scale data, and a history of substance abuse) and
demographic variables (i.e., age, race, and sex). Using
court decisions as criterion, the overall hit-rates of a
step-wise discriminant function analyses were comparable at
71.4% (clinical) and 71.2% (demographic). According to the
authors, these results are suggestive of a potential bias at
the referral and/or assessment stages. In contrast to
Rogers et al. (1988), Hart and Hare (1992) found that DSM-
III-R diagnosis best predicted group membership. The
addition of demographic variables (i.e., age, race, marital
status, education, and social class), criminal variables
(juvenile record, adult record, offence characteristics),
prior psychiatric treatment, and prior competency remands
did not improve the predictive power. One explanation for
the disparate results is the difference in diagnostic method
and sample characteristics of the populations (Nicholson &
Johnson, 1991). More specifically, the population used in
the Hart and Hare study was 90% White making it impossible
to evaluate race as an effective predictor variable.
Evaluation of the predictive accuracy of sociodemographic variables is important since bias related to such extralegal factors may suggest a lack of objectivity and thus, seriously affect the credibility of expert testimony regarding competency.

**Intelligence**

The assessment of competency to stand trial, as already mentioned, involves the assessment of the defendant’s functional abilities and these abilities cannot be directly assessed using traditional measures of intelligence or psychopathology. Interestingly, however, research has indicated that even the specialized competency instruments do evidence small correlations with measures of intellectual functioning (Nottingham & Mattson, 1981; Roesch & Golding, 1980; Shatin & Brodsky, 1979). According to Roesch and Golding (1980), even slight correlations between specialized competency measures and IQ scores challenge the validity of the instruments since IQ could be regarded as a confound in the assessment of functional abilities. While these concerns are warranted, Nicholson, Briggs et al. (1988) speculate that the correlations found for the CST may be a function of the test format rather than the competency construct itself. In contrast to the concerns of Roesch and Golding, there is support for the notion that IQ and, more specifically, mental retardation are valid reasons for a finding of incompetency.
A study by Heaton and Pendleton (1981) reviewed existent literature that related neurological test scores with measures of self-care, independent living, academic achievement, and vocational functioning. In general, research suggests that IQ correlates highly and positively with measurements of adaptive functioning (i.e., $r = .81$, Doll, 1945; $r = .89$, Lelan, Shellhass, Nihira, & Foster, 1967). For example, mentally disordered patients with IQs at or below 90 (Wechsler-Bellevue Intelligence Scale) were decidedly inferior in terms of self-care (i.e., showering, dressing, brushing teeth) and independent living (i.e., making telephone calls, moving about town freely) than their counterparts with higher IQs. Thus, it is reasonable to assume that if IQ has predictive power in relation to daily functioning, IQ would also have predictive power relation to functioning in a highly complex situation, such as a criminal trial.

Two studies have looked at the relationship between the GCCT-MSH and WAIS-R IQ scores (Johnson, Nicholson, & Service, 1990; Nicholson & Johnson, 1991). Johnson et al., (1990) found significant correlations between IQ and the defendant's score on the GCCT-MSH as well as staff competency decisions. Although both the competent and incompetent defendants demonstrated considerable cognitive impairment, those who were found competent did substantially better than those found incompetent. According to the
authors, these findings are consistent with the legal concept of competency as set forth in *Dusky* (1960). In order to meet the criteria of *Dusky* a defendant must show a reasonable degree of understanding of the proceedings and be able to work with his or her lawyer. Low intellectual functioning may impede these abilities and may in fact prevent the defendant from ever reaching a satisfactory level of competency (*Jackson v. Indiana*, 1972). Thus, it would be surprising if IQ scores were not at least slightly correlated with measures testing an individual's "rational and factual understanding" of these proceedings.

The concerns espoused by Roesch and Golding (1980) are important in addressing the functional relevance of a person's intelligence. According to Daniel and Menninger (1983), defendants with IQs of 60-70 have been able to meet the minimum criteria of the competency standard. What appears to be necessary is an evaluation of the nature of the relationship between competency measures and IQ scores as well as the predictive ability of IQ scores.

**Psychiatric Symptoms**

A meta-analysis comparing competent and incompetent criminal defendants suggested that patients exhibiting symptoms of serious psychopathology tend to be found incompetent more often than those who do not (*Nicholson & Kugler, 1991*). Specifically, the presence of delusions, hallucinations, disorientation, impaired memory, poor
judgment, thought and communication disturbance, and bizarre, unmanageable behavior were positively related to a judgement of incompetency. This finding is not surprising in that the presence of such symptoms is likely to interfere with functional abilities required to meet the Dusky criteria. The meta-analysis included a total of 30 studies; however, only 17 included psychosis as a variable and six actually assessed individual symptoms.

In part, the results of Nicholson and Kugler's study provide an explanation for the continued confounding of the presence of psychosis with the finding of incompetency. Defendants who exhibited symptoms of severe psychopathology (i.e., hallucinations, delusions, and behavioral disturbances) were more often found incompetent. However, the study does not support the notion that mental health professionals are equating a diagnosis of psychosis with incompetency since only 50% of the defendants who carry a psychotic diagnosis were found incompetent. It would be interesting to know whether the symptoms identified as predictors of incompetency are present to some degree in competent individuals and what other symptoms are relevant to the construct. Empirical data identifying psychiatric symptoms that are consistent with a finding of competency would support the notion that mental illness does not preclude competency.
The Vernon State Hospital Study

Existing research on competency to stand trial has focused primarily on differences between competent and incompetent defendants prior to adjudication. Such research has indicated that these defendants are different from each other in a number of ways, some of which can be evaluated using standardized psychometric measures. What is not known is whether incompetent defendants differ from one another during the competency restoration process. If so, can these differences be reliably measured and how can these differences help identify changes in an individual's competency status?

The following study assessed the predictive ability of specialized competency instruments in comparison with a number of clinical and sociodemographic variables. As already mentioned, research involving specialized competency measures has focused on the assessment of competency prior to the initial court decision. This study is unique in that the predictive power of these variables are evaluated for the first time with an already adjudicated, inpatient population. In addition, few studies have investigated the relationship between symptomatology and competency and those that have typically limited the inquiry to the presence/absence of psychotic symptoms only.

In the present study, two criteria were identified for the assessment of competency: Staff ratings of competency
and the total score on the GCCT-MSH. Existing research has indicated that there is high correspondence between staff competency ratings and the GCCT-MSH (e.g., 82%, Nicholson, Robertson et al., 1988). The correspondence at Vernon State Hospital was anticipated to be equal to or greater than 82% as the staff are trained in competency evaluations and employed an objective measure of competency in their evaluations. Staff ratings were dichotomous (competent or incompetent) but those used for analysis included three categories based on staff agreement (competent, incompetent, and mixed).

Based on the results of previous studies, it was hypothesized that the variables used to predict competency to stand trial (as per staff ratings) would include the General Legal Knowledge factor score (GCCT-MSH), two symptom patterns of the SCL-90-R (paranoid ideation and psychoticism), diagnosis of a psychotic disorder, and the overall score on the CST. The addition of other predictor variables was not expected to add to the predictive power.

As noted previously, one of the primary issues involved in competency evaluations is the misperception that the presence of psychosis equates with incompetency. To date, research has not fully addressed the relationship between current symptom patterns and competency decisions. In the present study the SCL-90-R was used to assess this relationship using the GCCT-MSH score as the criterion. It
was hypothesized that incompetent defendants (those scoring less than 35) and competent defendants (those with scores equal to or greater than 35) would produce significantly different symptom profiles. Specifically, incompetent defendants would show more severe symptomatology on the SCL-90-R scales of psychoticism, paranoid ideation, and hostility. In contrast, competent defendants were expected to have higher scores on the scales of anxiety and depression since they would be more cognizant of their legal situation and the potential ramifications. Furthermore, it was hypothesized that there would be no significant differences between groups with respect to the diagnosis of psychotic disorders. If correct, this finding would provide support for the notion that psychosis per se does not equate with incompetency. Rather, it may be the severity of the symptoms and their effect on functional abilities that is relevant to the issue of competency.

Lastly, analyses of the structure of the GCCT-MSH and the CST were conducted. Of particular interest was whether the factor structure of the GCCT-MSH, as identified by Nicholson, Briggs et al. (1988), could be replicated in a group of hospitalized defendants. Replication of the three factors would add empirical support for the construct validity of the instrument and its generalizability to a competency restoration group. In light of past research findings, further analysis of the structure of the CST
appears to be warranted. To date, factor analysis of the CST has produced equivocal findings suggesting that its predictive mechanism is more complicated than originally thought (Nicholson, Briggs et al., 1988).
CHAPTER II

METHOD

Subjects

The subjects were 120 male defendants hospitalized at Vernon State Hospital (VSH). One-hundred and ten (92.5%) of the defendants had previously been adjudicated as incompetent to stand trial, eight (6.7%) had been found not guilty by reason of insanity, and one (.8 %) was hospitalized for a pretrial competency evaluation. The average time between admission and testing was 60.7 days ($\text{SD} = 69.1$; median = 37 days).\(^1\) Seventy-one percent of the defendants had previously been hospitalized for psychiatric reasons.

The defendants' ages ranged from 19 to 68 years with a mean of 34.9 years ($\text{SD} = 10.0$). Racial composition was 50% ($n = 60$) African-American, 35.8% ($n = 43$) White, 12.5% ($n = 15$) Hispanic, and .8% ($n = 1$) Asian. Forty three (39.4%) of the defendants had completed less than twelve years of formal schooling, 49 (40.8%) had completed 12 years, and 17 (14.1%) had some post-secondary education. Sixty seven

\(^{1}\) The reported mean does not include one extreme outlier. One defendant had been hospitalized for 1160 days which changes the average time to 70.2 days and the standard deviation to 123.1 days.
(55.8%) of the defendants had previous criminal charges while 39 (32.5%) were being incarcerated for their first offense. Information regarding previous criminal history was unavailable or unknown in 14 (11.7%) of the cases. Violent offenses (e.g., murder, rape, aggravated assault) accounted for a total of 49.2% of the charges; non-violent offenses accounted for 44.2% of the charges; and 5.0% had more than one charge including both violent and non-violent offenses. Diagnostically, seventy-five (62.6%) defendants had received a diagnosis of a psychotic disorder, 59 (49.2%) a substance abuse disorder, and 17 (14.2%) a non-psychotic affective disorder (e.g., major depression without psychotic features). The percentage of diagnoses exceeds 100% because the categories are not mutually exclusive placing some defendants in more than one category.

**Materials**

Each subject completed the following five measures:
(a) the Georgia Court Competency Test - Mississippi State Hospital Revision (GCCT-MSH), (b) the Competency Screening Test (CST), (c) the Texas Competency Instrument (TCI), (d) the Shipley Institute of Living Scale (SILS), and (e) the Symptom Checklist - 90 Revised (SCL-90-R). Sociodemographic information was collected from the unit files at Vernon State Hospital.

The Texas Competency Instrument is a brief screening instrument that was developed at the Vernon State Hospital.
The scale was intended for use within the institution as a measure of the patients current level of competency. The measure has not been used outside the institution and its reliability and validity have not yet been established (refer to Appendix C).

The Shipley Institute of Living Scale (SILS) was developed in 1940 (Shipley, 1940) as a screening measure of organic brain damage but has been widely used as a brief estimate of intelligence (Bradford, 1960; Jacobson & Tamkin, 1988; Weiss & Schell, 1991). The SILS is a timed, paper and pencil test that consists of two subtests: vocabulary and abstract thinking. The subtests are scored to yield six summary scores, one of which is an estimated Full Scale IQ score (Zachary, 1988) based on either the Wechsler Adult Intelligence Scale (WAIS) or the Wechsler Adult Intelligence Scale Revised (WAIS-R). Several methods are available for converting the Shipley raw scores into IQ scores (Grayson, 1951, see Zachary, 1988; Paulson & Lin, 1970; Sines & Simmons, 1959; Zachary, Crumpton, & Speigal, 1985; Zachary, Paulson, & Gorsuch, 1985). The most widely used method has been the Paulson and Lin (1970) procedure since it provides both age-corrected and non-age-corrected conversion scores (Jacobson & Tamkin, 1988). However, this scoring system has been criticized because its norming procedure is not continuous resulting in large jumps in IQ scores between different age groups.
Recent research on the SILS has focused on the evaluation of the new procedure developed by Zachary et al. (1985). This scoring system is based on a regression formula and provides a continuous norming procedure which yields a more accurate age-corrected WAIS-R score than the non-continuous procedure developed by Paulson and Lin (Schear & Harrison, 1988; Zachary et al., 1985). The original validation study of the Zachary et al. procedure demonstrated correlations between the Shipley and the WAIS-R of .85 and .87. Weiss and Schell (1991) reported similar correlations (r = .86) while smaller correlations of .79, .73 and .45 were reported by Schear and Harrison (1988), Dalton, Pederson, and McIntyre (1987) and Retzlaff, Slincer, and Gibertini (1986) respectively. In general, research has indicated that the correlation between actual and estimated IQ's are somewhat smaller for individuals between the ages of 20 and 29 years and for WAIS-R IQs < 85 (Shear & Harrison, 1988). Despite the noted variability in IQ estimates, the majority of research indicates that the SILS provides an adequate estimate of WAIS-R IQ when time is limited or group administration is necessary. The present study converted SILS scores to WAIS-R estimated using the Zachary et al. (1985) procedure provided in the Shipley Institute of Living Scale - Revised manual.

The Symptom Checklist List-90-Revised is a self-report measure that was designed to reflect symptom patterns of
medical and psychiatric patients. The scale is composed of 90 items that comprise nine primary symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism), an independent category made up of seven items unique to that scale ("additional items"), and three "Global" indices: (a) the Global Severity Index (GSI) which combines information on numbers of symptoms and intensity of perceived distress; (b) the Positive Symptom Total (PST) which is a count of the number of reported symptoms; and (c) the Positive Symptom Distress Index (PSDI) which is a measure of the intensity of reported symptoms (Mitchell, 1985). The items are rated on a five-point Likert scale ranging from 0 ("not at all") to 4 ("extremely") using a time frame of the past week including the current day. Raw scores from the SCL-90-R are transformed to T-scores and plotted to produce a symptom profile. As already mentioned, the SCL-90-R is designed to be a self-report measure, however, in some instances oral administration may be the preferred mode since the reading level is reported to be as high as the eighth or ninth grade (Derogatis, 1983).

The internal consistency and test-retest reliability of the SCL-90-R are reported to be satisfactory and the measure appears to be stable across gender (cited in Mitchell, 1985). For example, a review by Payne (Mitchell, 1985)
states that internal consistency ranges from .77 to .90 and the test-retest correlation coefficients range from .78 to .90 over a one week period. Payne also stated that the test appears to demonstrate adequate levels of convergent, concurrent, discriminant, and construct validity similar to other self-report measures.

Procedure

Subjects were recruited on a daily basis by the examiner and a staff psychologist at VSH. The subjects were chosen in one of three ways: (a) they were recommended by staff; (b) they volunteered prior to being asked; or (c) they were chosen in a non-systematic fashion from a list of current residents on the unit. The single factor that prohibited an individual from being asked to participate was if any staff member considered the defendant to be too dangerous to be left alone with the examiner. The total number of people who refused to participate is not known but is estimated to be less than 15%.

The evaluations were conducted on an individual basis by a single examiner. All tests were administered orally in a standard order beginning with the SILS followed by the SCL-90-R, GCCT-MSH, CST, and TCI. The SILS and the SCL-90-R were administered first in an attempt to control for any confusion that may result from the defendant's subjective experience of the clinical versus psycholegal measures. Oral administration was considered preferential since the
reading level for the SCL-90-R is quite high (eighth or ninth grade) and the reading level of the defendants was not known prior to the evaluation.

Following the evaluation, the defendant's current level of competency was assessed by two mental health professionals (psychologist or social worker) who were familiar with the defendant's case. The staff members were asked to independently assess the defendant on the three elements of the Dusky standard: (a) "Whether the subject has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding"; (b) "whether he has a rational understanding of the proceedings against him; and (c) "whether he has a factual understanding of the proceedings against him" (Duskg v. The United States, p. 402; refer to Appendix D). The raters were then asked to make a categorical determination of the defendant's current level of competency. Ratings received more than two weeks post-evaluation were not used in the analyses.
CHAPTER III

RESULTS

Competency Ratings

Of 120 defendants, the staff unanimously agreed on 61.7% (n = 74) of the competency ratings. Of these 44.2% (n = 53) were judged to be incompetent and 17.5% (n = 21) were considered competent. The 35.8% disagreement is judged to be an artifact of the rating procedure rather than true disagreements based on relevant case information. Specifically, one of the two ratings for each defendant was conducted by a single staff member regardless of his knowledge of the particular case. Many of these cases were new admissions with whom this staff member had very little contact. In all questionable cases the staff member judged the individual to be incompetent. Comparison of the two raters' judgements resulted in a correlation of $r = .36$, $p < .01$ using the phi coefficient. Interestingly, the mean scores on the GCCT-MSH suggest that many of the questionable cases may have been competent at the time of evaluation. The mean score for the competent group was 39.7 (SD = 13.0), that for the questionable group was 34.5 (SD = 9.7), and the incompetent group was 26.5 (SD = 10.6). The competent and questionably competent groups were significantly different
from the incompetent group, \( F (2, 110) = 12.23, p < .0001 \) using the Scheffe range statistic. No differences were found between the mixed competency and the competent groups.

**Reliability of the Measures**

Scale reliability and item homogeneity were evaluated for both the GCCT-MSH and the CST. Analysis indicated that the GCCT-MSH exhibits good internal consistency, Cronbach’s coefficient alpha of .89; and an optimal level of homogeneity. The mean interitem correlation for the GCCT-MSH was .29. These results are consistent with those found by Nicholson, Briggs et al. (1988) who report an alpha coefficient of .88 and mean interitem correlation of .36. According to Briggs and Cheek (1986) the "optimal level of homogeneity occurs when the mean interitem correlation is in the .2 to .4 range" (p. 115). Analysis of the CST revealed a lower level of internal consistency, Cronbach’s alpha of .79, and a mean interitem correlation that was outside of the recommended range (\( r = .14 \)). Nicholson, Briggs et al. (1988) obtained slightly better reliability coefficients with an alpha of .85 and a mean interitem correlation of .20. The lack of item homogeneity of the CST in the current study suggests that the total score does not illustrate the complexity of the items that comprise the measure and that the test items may not be assessing a single construct (Briggs & Cheek, 1986).
Diagnosis and Other Descriptive Variables

Contrary to other studies, competent and incompetent defendants were not different in terms of their current DSM-III-R diagnosis using non-parametric analyses ($X^2; p > .05$). A total of 82 diagnoses were obtained in the samples and these were reduced to three general groups: Psychotic disorders (e.g., schizophrenia, delusional disorder, depression with psychotic features), non-psychotic affective disorders (all affective disorders without psychotic features), and substance abuse disorders. Furthermore, post-hoc analyses indicated that the groups were not different with respect to race, IQ, age, prior number of hospitalizations, or type of offense. The results are summarized in Table 1.

Current Symptomatology

A 2 X 12 multivariate analysis of variance (MANOVA) was performed to illustrate group differences on current symptomatology as measured by 12 subtests of the SCL-90-R. The results of the MANOVA were significant, $F (1, 114) = 1.87, p < .05$, indicating that competent defendants were different from incompetent on one subscale, the Positive Symptom Distress Index [$F (1, 114) = 5.69, p < .05$]. These results remained stable when the cutting score for competency was adjusted to account for the standard error of the mean for the GCCT-MSH ($SEM = 1.10$; two MANOVA’s using a
Table 1

Differences between Competent and Incompetent Defendants on Sociodemographic Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Competent</th>
<th>Incompetent</th>
<th>$X^2$ or t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td>.31</td>
<td>NS</td>
</tr>
<tr>
<td>African American</td>
<td>28</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(47.5%)</td>
<td>(52.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(52.5%)</td>
<td>(47.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offense</td>
<td></td>
<td>.59</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Violent</td>
<td>31</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(52.5%)</td>
<td>(59.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-violent</td>
<td>28</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(47.5%)</td>
<td>(40.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosisa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Psychotic</td>
<td>35</td>
<td>39</td>
<td>1.04</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>(59.3%)</td>
<td>(68.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(40.7%)</td>
<td>(31.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Non-Psychotic Mood Disorder</td>
<td>10</td>
<td>7</td>
<td>.51</td>
<td>NS</td>
</tr>
<tr>
<td>Disorders</td>
<td></td>
<td></td>
<td>(16.9%)</td>
<td>(12.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>49</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(83.1%)</td>
<td>(87.7%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 continues
<table>
<thead>
<tr>
<th>Variables</th>
<th>Competent</th>
<th>Incompetent</th>
<th>$X^2$ or $t$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Substance Abuse</td>
<td>26</td>
<td>32</td>
<td>1.69</td>
<td>NS</td>
</tr>
<tr>
<td>(44.1%)</td>
<td>(56.1%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(55.9%)</td>
<td>(43.9%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IQ</td>
<td>77.4 (17.7)</td>
<td>70.8 (22.5)</td>
<td>1.53</td>
<td>NS</td>
</tr>
<tr>
<td>Age</td>
<td>35.8 (9.90)</td>
<td>34.1 (10.2)</td>
<td>0.91</td>
<td>NS</td>
</tr>
<tr>
<td>Prior Hospitalizations</td>
<td>4.22 (6.4)</td>
<td>4.00 (4.5)</td>
<td>0.20</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Because of multiple disorders, diagnosis is analyzed separately for each category.

Counterintuitively, the competent defendants reported their current symptomatology to be more severe than did incompetent defendants. Neither group produced subscale elevations that fell in the clinical range and only the PSDI was significantly correlated with the GCCT-MSH ($r = .22$). The results of the MANOVA are summarized in Table 2.

As evident in Table 2, the groups exhibited highly similar scores on each of the 12 scales. In fact, the correlation matrix depicted in Table 3 shows that the 12 scales of the SCL-90-R are extremely highly correlated indicating redundancy in the measure. A study by Clark and Freidman (1983) also reported high interscale correlations.
Table 2

Symptom Patterns on SCL-90-R (T-scores) for Competent and Incompetent Defendants

<table>
<thead>
<tr>
<th>Scale</th>
<th>Competent</th>
<th></th>
<th>Incompetent</th>
<th></th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Somatization</td>
<td>48.5</td>
<td>14.1</td>
<td>45.6</td>
<td>21.0</td>
<td>.78</td>
</tr>
<tr>
<td>Obsessive Compulsive</td>
<td>46.2</td>
<td>13.5</td>
<td>44.2</td>
<td>21.3</td>
<td>.37</td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td>44.6</td>
<td>13.2</td>
<td>42.9</td>
<td>20.7</td>
<td>.27</td>
</tr>
<tr>
<td>Depression</td>
<td>45.3</td>
<td>14.0</td>
<td>41.5</td>
<td>20.2</td>
<td>1.37</td>
</tr>
<tr>
<td>Anxiety</td>
<td>44.7</td>
<td>14.1</td>
<td>42.1</td>
<td>21.2</td>
<td>.59</td>
</tr>
<tr>
<td>Hostility</td>
<td>44.0</td>
<td>13.2</td>
<td>44.0</td>
<td>21.5</td>
<td>0.00</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>45.3</td>
<td>12.7</td>
<td>44.0</td>
<td>20.6</td>
<td>.20</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>49.5</td>
<td>16.2</td>
<td>47.0</td>
<td>23.3</td>
<td>.45</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>43.1</td>
<td>12.8</td>
<td>41.1</td>
<td>20.7</td>
<td>.40</td>
</tr>
<tr>
<td>Global Symptom Index</td>
<td>32.5</td>
<td>8.4</td>
<td>30.2</td>
<td>13.7</td>
<td>1.20</td>
</tr>
<tr>
<td>Positive Symptom Total</td>
<td>46.0</td>
<td>9.6</td>
<td>46.8</td>
<td>12.5</td>
<td>.18</td>
</tr>
<tr>
<td>Positive Symptom Distress Index</td>
<td>24.7</td>
<td>5.8</td>
<td>21.0</td>
<td>10.4</td>
<td>5.69*</td>
</tr>
</tbody>
</table>

*p < .05
using the SCL-90-R at a Veterans Administration hospital. These authors then tested the significance of the correlations using principal components factor analysis and identified a single factor that accounted for 71.1% of the variance.

Multicollinearity in any measure is quite problematic. Logically, a high degree of redundancy is undesirable if one is wanting to measure a range of symptoms associated with particular constructs (e.g., schizophrenia, depression) that exist within a larger domain (e.g., psychopathology, see Tabachnick & Fidell, 1989). In this population, not much information would be lost if all the scales (excluding the global indices) were averaged in a global intensity score. In light of the high degree of multicollinearity, only the three global indices (i.e., GSI, PST, and PSDI) were used in subsequent analysis of clinical variables. These variables were chosen because the degree of intercorrelation was smaller and they represent both the extent and severity of psychopathology.

Predicting Competency: Clinical and Non-Clinical Variables

The planned discriminant function analysis could not be performed since a reliable external measure of competency could not be obtained. Conducting the proposed analysis using the GCCT-MSH total score as criterion would be inappropriate since the General Legal Knowledge factor score of the GCCT-MSH is derived directly from the test and
Table 3

Correlational Matrix of SCL-90-R Subscales

<table>
<thead>
<tr>
<th></th>
<th>OC</th>
<th>Sens</th>
<th>Dep</th>
<th>Anx</th>
<th>Host</th>
<th>Phob</th>
<th>Par</th>
<th>Psy</th>
<th>GSI</th>
<th>PST</th>
<th>PDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Som</td>
<td>.91</td>
<td>.94</td>
<td>.90</td>
<td>.92</td>
<td>.89</td>
<td>.91</td>
<td>.87</td>
<td>.90</td>
<td>.92</td>
<td>.72</td>
<td>.83</td>
</tr>
<tr>
<td>OC</td>
<td>.96</td>
<td>.96</td>
<td>.94</td>
<td>.92</td>
<td>.94</td>
<td>.92</td>
<td>.93</td>
<td>.96</td>
<td>.74</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Sens</td>
<td>.94</td>
<td>.92</td>
<td>.93</td>
<td>.94</td>
<td>.94</td>
<td>.92</td>
<td>.96</td>
<td>.73</td>
<td>.84</td>
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<td>Dep</td>
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<td>.94</td>
<td>.90</td>
<td>.92</td>
<td>.92</td>
<td>.91</td>
<td>.95</td>
<td>.72</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anx</td>
<td>.91</td>
<td>.93</td>
<td>.91</td>
<td>.91</td>
<td>.94</td>
<td>.76</td>
<td>.82</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Host</td>
<td>.94</td>
<td>.91</td>
<td>.92</td>
<td>.94</td>
<td>.71</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Phob</td>
<td>.89</td>
<td>.93</td>
<td>.97</td>
<td>.70</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
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<td>Par</td>
<td>.90</td>
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<td>.72</td>
<td>.82</td>
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<td>Psy</td>
<td></td>
<td>.94</td>
<td>.73</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>GSI</td>
<td></td>
<td></td>
<td></td>
<td>.66</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>PST</td>
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<td></td>
<td></td>
<td></td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note. Som = Somatization; OC = Obsessive-Compulsive; Sens = Interpersonal Sensitivity; Dep = Depression; Anx = Anxiety; Host = Hostility; Phob = Phobic Anxiety; Par = Paranoia; Psy = Psychoticism; GSI = Global Severity Index; PST = Positive Symptom Total; PDI = Positive Symptom Distress Index
accounts for 29.6% of the variance in this sample. Thus, the accuracy of prediction would be falsely inflated.

Three exploratory stepwise discriminant functions analyses were performed: (a) sociodemographic variables (i.e., race, offence, age, marital status, and education), (b) clinical variables [i.e., diagnosis, previous psychiatric hospitalizations, IQ, and three global indices of the SCL-90-R (i.e., Positive Symptom Distress Index, Positive Symptom Total, and Global Severity Index)], and (c) a combination of sociodemographic and clinical variables. Stepwise discriminant analysis using the sociodemographic predictors yielded a Wilks' lambda = .98, \( \chi^2 (2, n = 105) = 2.22, p > .05 \). The canonical correlation was .15, indicating that sociodemographic variables accounted for a total of 2.3% of the variance in competency status. The overall classification rate for these predictors was low with 53.3% of the defendants being accurately classified. The analyses produced accurate classifications in 32.7% of the GCCT-competent group and 76% of the GCCT-incompetent group. Of the 105 cases, 37 (67.3%) GCCT-competent defendants and 12 (24.0%) GCCT-incompetent defendants were misclassified.

Stepwise discriminant analysis using the clinical predictor variables yielded a Wilks' lambda = .89, \( \chi^2 (3, n = 84) = 8.4, p < .05 \). The canonical correlation was .33, indicating that clinical variables accounted for 10.9% of the variance in competency status. The overall
classification rate was 64.3% with 62.7% of the GCCT-competent group and 66.7% of the GCCT-incompetent group being accurately classified. The overall misclassification rate was 35.7%. Of the 84 cases evaluated, 19 GCCT-competent and 11 GCCT-incompetent defendants were misclassified (see Table 4).

The combination of sociodemographic and clinical variables decreased the classificatory accuracy in comparison with just clinical variables alone. The overall rate of classification was 59.7% as compared to 64.3% for the clinical variables alone. The analysis yielded a Wilks’ lambda = .69, $\chi^2 (7, n = 114) = 22.9, p < .001$. The canonical correlation was .55, indicating that the combined variables accounted for 30.3% of the variance in competency status. The classification rate of GCCT-competent group was 69.0% while that of the GCCT-incompetent group was 50.0%. The overall misclassification rate for this analysis was similar to that of the sociodemographic measures (40.8) alone at 40.4%. Eighteen (31.0%) of the GCCT-competent and 28 (50.0%) of the GCCT-incompetent defendants were misclassified (see Table 5).

**Factor Structures**

The GCCT-MSH was factor analyzed using principle axis factoring with varimax rotation. The relative suitability of two, three, four, and five factor solutions were assessed using scree tests, eigenvalues greater than one, and
Table 4

Stepwise Discriminant Model for Clinical Variables in the Classification of Competency to Stand Trial*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic Diagnosis</td>
<td>.70</td>
</tr>
<tr>
<td>Non-Psychotic Mood Disorder</td>
<td>.11</td>
</tr>
<tr>
<td>IQ</td>
<td>-.50</td>
</tr>
</tbody>
</table>

Overall classification 64.3%

* The eight predictor variables included in the analysis were the following: IQ, Positive Symptom Distress Index, Positive Symptom Total, Global Severity Index, number of previous hospitalizations, and a diagnosis of a psychotic disorder, substance abuse disorder, or non-psychotic affective disorder. The items included on Table 4 are those that remained in the function and are presented in the order that they entered.

Interpretability of the solution. Table 6 delineates the factor structure outlined by Nicholson, Robertson et al. (1988) and that identified in the present study. As evident in Table 6, the two factor structures are similar when evaluating items with factor loadings greater than or equal to .35. The primary difference is that the current sample displays substantially more overlap among the three
Table 5

**Stepwise Discriminant Model for Combined Sociodemographic and Clinical Variables in the Classification of Competency to Stand Trial**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic Diagnosis</td>
<td>.50</td>
</tr>
<tr>
<td>Non-Psychotic Mood Disorder</td>
<td>.37</td>
</tr>
<tr>
<td>Age</td>
<td>-.20</td>
</tr>
<tr>
<td>Violent Offence</td>
<td>.35</td>
</tr>
<tr>
<td>Positive Symptom Distress</td>
<td>-.19</td>
</tr>
<tr>
<td>Index</td>
<td></td>
</tr>
<tr>
<td>Global Severity Index</td>
<td>.01</td>
</tr>
<tr>
<td>Marital Status (single/other)</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Overall classification 59.7%

* Thirteen predictor variables were included in the analysis. These consisted of all of the clinical and sociodemographic variables listed previously in the text. The variables listed in Table 5 are those that remained in the function and are presented in the order that they entered.
Table 6

Factor Structure of the GCCT-MSH Revision: Nicholson et al. (1988) and the Current Study

<table>
<thead>
<tr>
<th>Item</th>
<th>Nicholson et al. (1988)</th>
<th>Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>1</td>
<td>.40</td>
<td>.59</td>
</tr>
<tr>
<td>2</td>
<td>.30</td>
<td>.63</td>
</tr>
<tr>
<td>3</td>
<td>.40</td>
<td>.39</td>
</tr>
<tr>
<td>4</td>
<td>.42</td>
<td>.73</td>
</tr>
<tr>
<td>5</td>
<td>.21</td>
<td>.47</td>
</tr>
<tr>
<td>6</td>
<td>.34</td>
<td>.45</td>
</tr>
<tr>
<td>7</td>
<td>.06</td>
<td>.73</td>
</tr>
<tr>
<td>8</td>
<td>.49</td>
<td>.24</td>
</tr>
<tr>
<td>9</td>
<td>.59</td>
<td>.47</td>
</tr>
<tr>
<td>10</td>
<td>.79</td>
<td>.28</td>
</tr>
<tr>
<td>11</td>
<td>.50</td>
<td>.31</td>
</tr>
<tr>
<td>12</td>
<td>.41</td>
<td>.36</td>
</tr>
<tr>
<td>13</td>
<td>.72</td>
<td>.12</td>
</tr>
<tr>
<td>14</td>
<td>.41</td>
<td>.19</td>
</tr>
<tr>
<td>15</td>
<td>.20</td>
<td>.04</td>
</tr>
<tr>
<td>16</td>
<td>.33</td>
<td>.04</td>
</tr>
<tr>
<td>17</td>
<td>.60</td>
<td>.32</td>
</tr>
<tr>
<td>18</td>
<td>.15</td>
<td>.27</td>
</tr>
<tr>
<td>19</td>
<td>.08</td>
<td>.17</td>
</tr>
<tr>
<td>20</td>
<td>.09</td>
<td>.29</td>
</tr>
<tr>
<td>21</td>
<td>.26</td>
<td>.17</td>
</tr>
</tbody>
</table>

Variance Accounted For 18.0% 16.0% 15.0% 29.6% 6.7% 5.0%
factors than does the original. Interestingly, the factor structure of the current sample becomes more distinct and is more easily interpreted using loadings of greater than .40. However, loadings of .40 or greater decreases the similarity between the two samples. In general, it appears as though the majority of items that loaded on Factor 3 in the Nicholson study loaded preferentially on Factor 1 in the current study. These results suggest that the previously identified factors may be less stable in an inpatient population during the competency restoration process.

Additional analyses of the factor structure of the GCCT-MSH were conducted using linear structural equation modeling (LISREL-VIII; Joreskog & Sorbom, 1988). Three models were identified and subjected to confirmatory factor analysis. The parameters of the matrices allowed the factors to correlate and three items (one for each factor) were given initial loadings of 1.00. The items for models 1 and 2 were chosen on the basis of Nicholson, Robertson et al.'s (1988) and Bagby et al.'s (1992) three factor structures. Specifically, the items were those that displayed the highest loadings and were unique to each factor. The items for the third model were those that loaded highest on the three item sets as per Nicholson, Robertson et al. (1988). The three models tested were: (a) the model proposed by Nicholson, Robertson et al. (1988); (b) the model identified by Bagby et al. (1992); and (c) a model based on the
Table 7

**Estimation Indices for Evaluating Suitability of the Models**

<table>
<thead>
<tr>
<th>Model</th>
<th>$X^2$</th>
<th>df</th>
<th>$p$</th>
<th>GFI</th>
<th>Adj-GFI</th>
<th>RMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicholson</td>
<td>348.06</td>
<td>180</td>
<td>.0001</td>
<td>.78</td>
<td>.72</td>
<td>.05</td>
</tr>
<tr>
<td>et al. (1988)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagby et al.</td>
<td>467.62</td>
<td>179</td>
<td>.0001</td>
<td>.74</td>
<td>.66</td>
<td>NA</td>
</tr>
<tr>
<td>(1992)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theoretical</td>
<td>455.12</td>
<td>188</td>
<td>.0001</td>
<td>.73</td>
<td>.67</td>
<td>.08</td>
</tr>
<tr>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** GFI = Goodness of Fit Index, Adj GFI = Adjusted Goodness of Fit Index, RMR = Root Mean Residual Square.

*Factor 1: Items 10, 13, 17, 9, 11, 8, 14, 3, 4, 1, 12; Factor 2: Items 9, 3, 7, 4, 2, 1, 5, 6, 12; Factor 3: Items 21, 19, 18, 15, 16, 20, 12

*Factor 1: Items 2, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21; Factor 2: Items 1, 2, 3, 4, 5, 6, 7, 11; Factor 3: Items 14, 15, 16, 17, 18, 19, 21

*Factor 1: Items 1, 2, 3, 4, 5, 6, 7; Factor 2: Items 8, 9, 10, 11, 12, 13, 14
Factor 3: Items 15, 16, 17, 18, 19, 20, 21
structure of the GCCT-MSH (refer to Table 7 for factor composition).

The models were evaluated using the Chi Square statistic, goodness-of-fit index (GFI), adjusted goodness-of-fit index (Adj-GFI), and the root mean square residual (RMR). In general, indicators of a good fit include: (a) small Chi Square values relative to degrees of freedom; (b) GFI and Adj-GFI index above .90; and (c) and RMR approaching zero (Baldwin, 1989; Harmon, 1978). Statistical significance of the Chi Square indicates that the proposed models were significantly disparate from the data and all models were rejected (see Table 7). Standardized path coefficients for the Nicholson et al. model and those based on test structure are presented in Figures 1 and 2. The standardized path coefficients could not be calculated for the Bagby et al. model as the proposed structure did not pass preliminary analyses.

Concordance Among the Psycholegal Measures

Post-hoc analyses demonstrated moderate correlations among the three competency measures and a consistent, low level correlation between the psycholegal measures and staff rating of competency (see Table 8). In addition, the three measures display a moderate to low level of agreement in terms of overall classification rates. Similar to the results of Schreiber, Roesch, and Golding (1987) and Nicholson, Robertson et al. (1988) the CST overselected for
Figure 1

Confirmatory Factor Analysis of Nicholson, Briggs et al. (1988) Model
Figure 2

Confirmatory Factor Analysis of the Model Based on the Test Structure
Table 8

Correlations Among all Psycholegal Measures of Competency To Stand Trial

<table>
<thead>
<tr>
<th></th>
<th>CST</th>
<th>GCCT-MSH</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCI</td>
<td>.62</td>
<td>.62</td>
<td>.38</td>
</tr>
<tr>
<td>CST</td>
<td>.52</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td>GCCT-MSH</td>
<td></td>
<td></td>
<td>.41</td>
</tr>
</tbody>
</table>

Note. Rating = Agreement between two staff members on defendant’s competency. All correlations were significant at p < .02.

incompetency to such a large degree that its utility as useful screening device is questioned.

Using the cutoff score recommended by Lipsitt et al. (1971) and Wildman et al. (1978), the CST and GCCT-MSH displayed highly discordant classification rates. The overall hit rate for the two measures was 62.8%. Of the 94 defendants who completed both the CST and the GCCT-MSH, 23 were classified as competent and 36 were classified as incompetent according to both measures. The CST misclassified 28 of the GCCT-competent defendants as incompetent (false negative rate 54.9%) and 7 of the GCCT-incompetent defendants as competent (false positive rate 16.3%). Establishing a more appropriate cutoff score for
the CST was not possible in this population. As mentioned earlier, the CST is a screening measure for competency and this requires that the false positive rate be minimized. A 0% false positive rate (CST score 26 or greater) misclassified 74.5% of the GCCT-competent defendants as incompetent. By increasing the false positive rate close to 7% the CST still misclassified an extraordinarily high number of GCCT-competent defendants as incompetent (64.5%). These values are similar to those obtained in previous studies.

Of the 104 defendants who completed both the GCCT-MSH and the TCI 44 were classified as competent while 35 were classified as incompetent on both measures using the recommended cutoff scores. The overall hit rate for the TCI was 76%; accurate classification of the GCCT-competent group was 78.6% while that for the GCCT-incompetent group 72.9%. Of the 104 defendants, 12 of the GCCT-competent defendants were misclassified as incompetent (false negative rate 21.4%) and 13 of the GCCT-incompetent were misclassified as competent (false positive rate 27.1%). Reducing the false positive rate to 0% (obtained by using perfect score) resulted in a substantial increase in the false negative rate (78.6%) and reduced the hit rate for the GCCT-competent group to 21.4%. However, a cutting score of 33 produced a much better classification rate than the current value of 30. Using a cutting score of 33 the TCI accurately
classified 77.9% of the defendants while misclassifying 4 (8.3%) as competent and 19 (33.9%) as incompetent.
CHAPTER IV

DISCUSSION

This study is the first systematic investigation of the assessment of competency to stand trial with defendants in a competency restoration program. The GCCT-MSH and the CST were evaluated regarding their ability to assess competency in an inpatient population. In doing so, the efficacy of clinical variables in assisting with competency predictions was evaluated.

Psycholegal Measures of Competency to Stand Trial

Convergent validity among competency measures. As already mentioned, the GCCT-MSH, CST, and TCI were found to be moderately correlated. However, despite significant correlations, the GCCT-MSH and the CST classified competency status differently. In fact, CST accuracy was much lower in the current study as compared those found by Randolph et al. (1981) using a similar inpatient population. Randolph et al. (1981) obtained a hit rate of 72.0%, a false positive rate of 47.0%, and a false negative rate of 0%. These are in contrast to the current findings at 62.8%, 54.9%, and 16.3% respectively.

Furthermore, the format of the CST appeared to be problematic for the defendants as the majority of subjects
were unable to form sentences (appropriate or not) in response to the stems. The difficulty with the CST for use with an inpatient population is nicely illustrated by the group means. The mean score for the GCCT-competent group was 17.6 (SD = 9.1) while that for the GCCT-incompetent group was 9.9 (SD = 8.2); the highest possible score is 44. Despite the clear differences between group means, what is particularly interesting is that both of these scores are substantially below the recommended cutoff of 21. Thus, the CST appears to be inappropriate for an inpatient population.

In contrast to the CST, the TCI displayed a moderate correlation with the GCCT-MSH as well as concordance in classification. Obviously these results serve only as a preliminary analysis of this measure, but it shows promise as a potential alternative to the CST. In fact, a number of features of the TCI make it an attractive alternative to the CST in an impatient population. Such features include the straightforward, multiple choice format, a low reading level (estimated to be approximately grade 5), and a short time to completion (typically under 20 minutes).

An interesting finding was the low correlation between self-report measures and staff ratings of competency. This finding suggests that staff's perceptions of competency are not strongly related to legal variables as measured in the study. In looking at the overall correlational matrix, it
appears as though staff members may be influenced by their perception of a defendants' knowledge of the legal system in conjunction with current diagnosis, IQ, and level of education (all displayed correlations of at least $p < .05$).

**Construct Validity of GCCT-MSH and CST.** The results of this study suggest that the factor structure proposed by Nicholson et al. (1988) may not generalize to inpatient populations where the defendants have already been adjudicated as incompetent. The results of the current study suggest that a two factor solution may be more appropriate for this sample: (a) Legal Knowledge (i.e., a composite of General Legal Knowledge and Specific Legal Knowledge) and (b) Courtroom Layout.

To date, factor analytic studies on the GCCT-MSH have been conducted with defendants who were court-ordered for competency evaluations at the pretrial stage. This is the first study of an inpatient population at a maximum security hospital and it is likely that the lack of fit between the models relates to population differences. For example, unfit defendants may be psychologically more impaired then pretrial defendants making it more difficult for the factors to emerge. Also, 66% of defendants in the current study had been involved in a competency restoration program. The lack of differentiation of the factor structure may be related to involvement in programs that teach the three elements of the Dusky standard.
Upon further evaluation, it appears as though the factor titled Legal Knowledge has more clinical utility than Courtroom layout. While Courtroom Layout was statistically able to distinguish between the two groups ($t = 6.18$, $p = .0001$) the differences are not considered clinically useful (Competent: $M = 4.6$, $SD = .66$; Incompetent: $M = 3.3$, $SD = 1.4$). In contrast, Legal Knowledge, appears to have greater clinical utility exhibiting a mean factor score of 17.0 ($SD = 2.2$) for the competent group and a mean factor score of 8.4 ($SD = 4.3$) for the incompetent group ($t = 13.53$, $p < .0001$). Furthermore, the overall scores on the GCCT-MSH were bimodally distributed suggesting that Legal Knowledge is essentially a dichotomous variable despite a wide range of possible scores. The mean score on the GCCT-MSH for incompetent defendants was 22.1 ($SD = 1.22$) while that for the competent defendants was 41.53 ($SD = .60$).

Although the GCCT-MSH appears to assess competency differently here than in previous studies, the results suggest that it is potentially valuable in the assessment of competency at an inpatient setting. In fact, in light of the bimodal distribution, the GCCT-MSH may provide a better classification rate with this population since there is minimal overlap between the two groups. Of course, the base rate of incompetency is significantly higher in an inpatient setting which would increase the sensitivity of the instrument.
Clinical Data and Competency Evaluations in a Markedly Disturbed Population

Invalidity of SCL-90-R. Perhaps the most perplexing issue is the lack of relationship between the severity of psychotic symptoms and incompetency. As mentioned previously, existent research has identified a relationship between a finding of incompetency and symptoms such as delusions, hallucinations, and loose associations. In the current study, the presence of psychotic symptoms as well as the severity of these symptoms was surprisingly low (see Derogatis, 1983, p. 39 for inpatient norms) regardless of competency status. One possible explanation for this finding is that the SCL-90-R is inappropriate for this population. In fact, there is evidence to suggest that this is a valid concern. Two points will be considered.

First, clinical observation of the defendants indicated that the severity of the current illness was negatively related to symptom endorsement. This may reflect an overall lack of comprehension for the test format (in particular the five-point likert scale) or it may relate to an inability to verbalize current symptoms according to rigid guidelines.

Second, in less severe cases where comprehension did not appear to be an issue, defendants still reported symptoms at mild to moderate levels of severity. There are at least three possible explanations for this finding: (a) the defendants employed a response set involving low endorsement
of symptoms, (b) the milieu therapy at Vernon State Hospital, and (c) the effect of medication. If the first explanation is correct, the response set is likely related to the face validity of the measure and the defendant’s desire to present as healthy as possible under the mistaken belief that this presentation could help to expedite their release. Alternatively, if the second hypothesis is correct, then the living conditions at the hospital may be such that the defendants are comfortable with their overall treatment program to the extent that they were truly asymptomatic. Finally, if the third hypothesis is correct, then it appears as though pharmacologic treatment acts to reduce symptom endorsement on the SCL-90-R. In some cases it appeared as though the defendants were well stabilized on medication and could have been accurately portraying current symptomatology. In other cases, however, there was evidence to suggest that pharmacologic treatment had not yet stabilized the defendant’s condition. These individuals tended to appear quite disorganized (i.e., perseverative responding, slurring of speech, poor concentration, and inappropriate affect) yet denied being bothered by current symptoms.

Constraints of IQ Estimates. In the current study, IQ did not appear to be relevant to current competency status. Similar to previous research (Nicholson & Johnson, 1991; Roesch & Golding, 1981; Shatin & Brodsky, 1979), IQ
estimates evidenced low correlations with all psycholegal measures ($r = .27$, GCCT-MSH, $p < .05$; $r = .23$, CST, $p < .05$; $r = -.01$, CST). With respect to Wechsler's classification of level of intellectual functioning, both competent and incompetent defendants exhibited average estimated IQ scores that fell in the borderline range. These groups were not significantly different on this variable ($t = 1.46$, $p > .05$). This finding is consistent with previous research by Nicholson and Johnson (1988) who found that the average WAIS-R full scale IQ for all defendants was 76.3 ($SD = 14.1$).

The fact that both groups displayed such low IQ estimates raises a question regarding how capable defendants need to be in order to meet a satisfactory level of competence. Are the defendants exhibiting a true understanding for the legal process or are they simply reiterating information they have memorized in class? Based on the low level of intellectual functioning, it is unlikely that the defendants have developed a true conceptual understanding of the functional requirements for competency but rely to a great extent on memory. If this is indeed the case, then the extent to which the GCCT-MSH assesses competency in accordance with Dusky is debatable.

This concern is nicely illustrated using the findings of Heaton and Pendleton (1981). As already discussed, these authors found that mentally disordered individuals with a
tested IQ under 90 tend to function poorly on a day-to-day basis and are often unable to care for basic needs. According to Daniel and Menninger (1980), defendants with IQ’s as low as 60 or 70 are able to satisfy the requirements to meet the minimum standards of competency to stand trial. This finding suggests that being able to function adaptively on a daily basis (i.e., bathing, getting dressed, being able to mail letters) requires a higher level of measured intelligence than understanding the basic operations of the legal system. This supposition is quite troubling in light of the complexity of the legal system. Surely understanding the role of the Judge, jury, and attorney requires a higher level of intellectual functioning than tasks found in daily living.

It should be noted that these results are limited by disparate sample sizes between GCCT-competent and GCCT-incompetent defendants. Of the 57 defendants classified as incompetent 23 (40%) of them did not provide data on IQ. Of the 23, 13 could not read, eight attempted the test but could not complete it, one was missing information pertinent to the calculation, and two obtained a score that was too low to calculate an accurate IQ estimate. Conversely, only eight of 59 GCCT-competent defendants did not provide an IQ estimate. Of the eight, four could not read, three attempted the test but could not complete it, and one obtained a score that was too low to calculate an IQ.
estimate. Thus, it is likely that the competent defendants were higher in IQ than the incompetent which may strengthen the correlation between IQ estimates and psycholegal measures. However, this does not negate the previous discussion since the incompetent groups' average IQ would decrease leaving the competent group in the borderline range.

Clinical determinants of competency. In this investigation, only one of the clinical predictor variables, the Positive Symptom Distress Index, was significantly correlated with competency status. In addition, the results of cross-tabulation indicated that the groups were not significantly different with respect to current diagnosis or intellectual functioning. Thus, it is not surprising that the combination of these variables did not accurately predict competency. The hit rate for the combination of the eight clinical variables was 64.3% and included only three items. According to the discriminant function, an incompetent defendant is characterized by the presence of either a psychotic disorder or a non-psychotic affective disorder, and a low estimated IQ. This function is conceptually equivalent to one that suggests that the presence of a mental disorder in combination with a low IQ is predictive of incompetency. Of the 120 defendants 92 received one of these diagnoses while the rest received a diagnosis of a substance abuse disorder (either
independently or in combination with a psychotic or nonpsychotic affective disorder). Interestingly, the presence of a substance abuse disorder displayed a higher correlation with competency status than did nonpsychotic affective disorders but it was not effective as a predictor variable. The absence of this variable as an adequate predictor does not reflect its lack of predictive power but rather the high degree of shared variance between it and a psychotic disorder. Obviously, the function tells us little about the characteristics of competent versus incompetent defendants.

An important issue to consider in terms of identifying accurate predictors of competency status is the range of competency exhibited in the population and the homogeneity of psychopathology and symptomatology. In comparison with a pretrial population, an inpatient population exhibits finer gradations of competency within a much narrower range (completely incompetent to marginally competent) requiring the GCCT-MSH to function in a different manner. Thus, the overall lack of discriminatory power should not be particularly surprising.

Potential bias of nonclinical information. A major concern regarding the assessment of competency to stand trial regards the level of influence extralegal factors have on competency decision making. In contrast to the findings of Rogers, et al. (1988), there was no indication of bias
based on age, race or other sociodemographic variables. The lack of discriminating power suggests that competency status, as measured by the GCCT-MSH, does not appear to be strongly influenced by extra-legal factors that are irrelevant to competency status.

As already mentioned, the results of the discriminant functions analyses indicated that sociodemographic predictors such as age, race, and type of offense do not accurately predict competency status. In fact, the rate of improvement above chance is close to nil as reflected by the 53.3% hit rate. In addition, the combination of sociodemographic variables and clinical variables actually decreased the accuracy of classification in comparison with clinical variables alone. This finding suggests that sociodemographic variables do not assist in the prediction of competency and that they may actually detract from the abilities of other relevant variables.

Implications for Further Research

As mentioned previously, the SCL-90-R is considered to be an inappropriate measure of symptoms for this population. Not only is the scale considered inappropriate in terms of format but the content may not be addressing all of the issues relevant to the prediction of competency. In relation to psychotic symptomatology, the SCL-90-R focuses on the presence of positive symptoms related to disordered thought processes (e.g., having thoughts that are not your
own, hearing voices that other people do not hear) to the exclusion of negative symptoms (e.g., poverty of speech, emotional withdrawal, affective flattening or motor retardation). Researchers have found that negative symptoms show a stronger relation to premorbid dysfunction and are believed to tap long-standing characteristics of the individual (Walker & Lewine, 1988). Furthermore, negative symptoms have been found to be predictive of poor prognosis including poor occupational functioning, more psychiatric hospitalizations, and a lower level of intellectual achievement (Walker & Lewine, 1988).

To date, research has focused almost exclusively on the relationship between competency and positive psychotic symptoms and the evaluation of negative symptoms appears to be warranted. Research employing instruments such as the Scale for Assessment of Negative Symptoms (Andreason, 1981) and the Scale for Assessment of Positive Symptoms (Andreason, 1983) could help elucidate possible relationships as well as help control for response styles inherent in self-report measures.

Following from this, the use of diagnostic interviews as a measure of symptomatology appears to be warranted. Appropriate measures include, but are not limited to, the Schedule of Affective Disorders and Schizophrenia (SADS) and the Structured Clinical Interview for DSM-III-R Diagnosis (SCID). One of the principal benefits to using structured
interviews is the comprehensive assessment of symptomatology and the intensity of the symptoms. In addition, it is more difficult to maintain a consistent response style in an interview format thus, it provides some control for this confound.

At present, the issue regarding the susceptibility of the GCCT-MSH to dissimulation has not yet been adequately addressed (preliminary research has been conducted but the results have not yet been published). It is speculated that inmates who are trying to avoid prosecution or reduce penalties may consider the GCCT-MSH easily falsifiable in light of its high face validity. Thus, identifying particular response patterns associated with malingering on the GCCT would facilitate clinical decision making regarding competency to stand trial. The Structured Interview of Reported Symptoms (SIRS) is the only standardized instrument available for assessment of malingering. Thus, a combination of the GCCT-MSH, the SIRS and a diagnostic interview would provide information on the relationship of symptomatology and competency, help to elucidate potential response styles in competency evaluations, and provide a current assessment of diagnosis rather than relying on chart information.

The current study was unable to fully address the nature of the relationship between competency measures and IQ scores due to the limitations of the Shipley Institute of
Living Scale. The results of the current study raised some concern regarding the level of intellectual functioning required to meet the minimal standards of competency. According to Dusky (1960), the defendant must have a rational as well as factual understanding of the proceedings against him. The degree to which this requirement is satisfied has not been systematically evaluated. Examining the relationship between competency status and IQ using the Wechsler Adult Intelligence Scale - Revised (WAIS-R) appears to be warranted. In addition to providing a more accurate estimate of intellectual functioning, the WAIS-R provides a number of subtest scores that may help to elucidate specific cognitive deficits associated with incompetency.

Lastly, the factor structure of the GCCT-MSH identified by Nicholson, Briggs (1988) was not replicated in the current study but instead a two factor model was proposed. These results provide an initial investigation of the way in which the GCCT-MSH functions in an inpatient population. These results needs to be replicated in order to evaluate whether the domains of the competency construct are different in this population or if the results of the current study are an artifact.
APPENDIX A

GEORGIA COURT COMPETENCY TEST - GCCT-MSH (1992 REVISION)
GEORGIA COURT COMPETENCY TEST - GCCT - MSH (1992 REVISION)

I. Layout of the Courtroom/Roles of Participants

Picture of court (one point for correct answer)

___ 1. Where does the judge sit?

___ 2. Where does the jury sit?

___ 3. Where will you sit?
   (correct if testee points to either table in front of bench)

___ 4. Where will your lawyer sit?
   (correct if testee points to the table at which he has indicated that he will be seated)

___ 5. Where will the District Attorney (Prosecutor) sit?
   (correct if testee points to the table opposite from the one at which he has indicated he will be seated)

___ 6. Where will the witness testify?

___ 7. Where do the people watching the trial sit?

Functions (two point maximum for each question)

___ 8. What does the Judge do during the trial?
   (one point for knowing that the judge keeps order during the trial, or instructs the jury, or makes decisions on points of law, etc.; one point for knowing that he passes sentence - maximum = 2 points)

___ 9. What does the Jury do?
   (two points for knowing that jury rules the defendant guilty or not guilty)

___ 10. What will your lawyer do?
   (two points for knowing that the lawyer will try to "defend" him/her or will attempt to disprove ("beat") the charges)
11. What will the District Attorney (prosecutor) do?
(two points for knowing that he will try to get a conviction or "put me in jail")

12. What do the witnesses do?
(one point for knowing that witnesses talk to those in the courtroom or two points for knowing that they answer questions about the case)

13. What do the people watching the trial do?
(two points for knowing that the audience sits quietly and observes the trial)

14. What will you do during the trial?
(two points for knowing that the defendant remains seated and quiet or for knowing that he should do as his attorney tells him)

II. Charges/Consequences/Recollection of Events

Ability to assist attorney

15. What is your attorneys name?
(one point for correct answer)

16. How can you contact him/her?
(two points for knowing phone number, address or some other reasonable means of contact)

17. How can your lawyer help defend you?

0 No answer or incoherent
2 States he will work with lawyer but does not state how
4 States that he will work with lawyer by answering his questions about the case
6 States he will help lawyer by answering his questions and by telling him his side of the story
**Charge**

___ 18. What are you charged with?

0 No answer or totally incoherent
1 Description of behavior but no charge stated (e.g., "took a car" instead of grand larceny)
2 Related but incorrect charge (e.g., breaking and entering instead of burglary)
3 Incomplete or partially correct charge (e.g., assault instead of aggravated assault)
4 Complete formal charge

___ 19. What does that mean?

0 No answer or incoherent
1 Incorrectly describes incorrect charge (e.g., stole a gun as description of assault when true charge is kidnapping)
2 Correctly describes related but incorrect charge (e.g., breaking and entering instead of burglary)
3 Partial or incomplete description of correct charge (e.g., hurting someone instead of murder)
4 Complete and correct description of correct charges

___ 20. If the jury finds you guilty on this charge, what might they do to you?

0 No answer or totally incorrect
1 States nothing will happen because ... (e.g., has a good lawyer; didn't do anything wrong)
2 States that there will be penalty but has no idea what it will be
3 Penalty too light or too severe for offense (e.g., 1 yr. in prison for murder)
4 Answer complete and consistent with offense

___ 21. You do not have to answer this question. But if you choose to, I would like you to tell me as much as you can about the events which lead to your arrest?

0 No answer or totally incoherent
2 Vague answer which is difficult to understand or which is unbelievable or obviously delusional in nature
4 Understandable but inconsistent answer
6 Consistent answer or well-stated decision not to answer
8 Well-stated, consistent answer
BEHAVIORAL OBSERVATIONS:

Raw Score $\times 2 = $ Final Score

$\underline{\quad} \times 2 = \underline{\quad}$
III. Screening for Atypical Presentation

Format for answer:  
0 No or does not apply  
1 Qualified yes or "sometimes"  
2 Definite yes

1. When the lawyers are talking among themselves, are you worried that they might be telling dirty jokes at your expense?

2. When you are in the courtroom, have you ever become convinced that everyone knew your most private thoughts just by looking at you?

3. Are the judge's black robes associated with black magic?

4. Do you often wonder what the court reporter is really thinking?

5. I asked you before about criminal charges. Do you sometimes get confused when they talk about the charges against you and start thinking about charges on a credit card or electrical charges?

6. When you talked to the police, did they use mind control to get you to say things against your will?

7. Do you ever worry that most of the people in the courtroom are impostors and that they are just pretending to be who they say they are?

8. Witnesses are asked to swear an oath on the Bible. Do you worry about what God might do, if other people were to tell lies on the witness stand?
The Competency Screening Test

1. The lawyer told Bill that ____________________________
2. When I go to court the lawyer will ___________________
3. Jack felt that the Judge ____________________________
4. When Phil was accused of the crime he __________________
5. When I prepare to go to court with my lawyer _________
6. If the jury finds me guilty __________________________
7. The way the court trial is decided ____________________
8. When the evidence in George's case was presented to the jury ________________________________
9. When the lawyer questioned his client in court, the client said _________________________________
10. If Jack has to try his own case, he _________________
11. Each time the D.A. asked me a question, I _________
12. While listening to the witness testify against me I ________________
13. When the witness testifying against Harry gave incorrect evidence, he _________________________
14. When Bob disagreed with his lawyer on his defense, he ______________________________________
15. When I was formally accused of the crime, I thought to myself ________________________________
16. If Ed's lawyer suggests that he plead guilty, he _____________________________________________
17. What concerns Fred most about his lawyer is _________
18. When they say a man is innocent until proven guilty _________________________________________
19. When I think of being sent to prison, I ________________
20. When Phil thinks of what he is accused of, he _________
21. When the jury hears my case, they will _____________

22. If I had a chance to speak to the judge, I _____________
Texas Competency Measure
Vernon State Hospital

Research Protocol Number: _________

Gender: _______ Age: _________

Circle the best single answer.

1. If you were not ready to stand trial you would be sent to a psychiatric hospital. Who would commit you there?
   a. the Chief of Police
   b. the FBI
   c. the court
   d. the psychiatrist

2. When you are not ready to go to trial, it means that you are:
   a. in contempt
   b. innocent
   c. incompetent
   d. in trouble

3. If you were sent to a hospital, because you were not ready to stand trial, you could leave when:
   a. the weather is right
   b. the wounds heal
   c. your mother wants you
   d. the hospital says so

4. Only the court may decide:
   a. your disability
   b. your income level
   c. your readiness to go to trial
   d. your date of birth

5. If you were sent to a hospital, because you were not ready to stand trial, you would leave when:
   a. you learn to be competent
   b. you learn to dress yourself
   c. you are able to talk to God
   d. you pay your hospital bill
6. To stand trial, a person must:
   a. understand his charges
   b. walk without assistance
   c. pay his lawyer
   d. pray

7. To stand trial, a person must:
   a. stand up
   b. know courtroom jobs
   c. pay his lawyer
   d. pray

8. A plea of guilty means:
   a. you're going home.
   b. you didn't do the crime.
   c. you did the crime.
   d. you're insane.

9. When the charge against you is serious, it is called:
   a. jay walking
   b. felony
   c. misdemeanor
   d. join the army

10. If you are sent to a hospital, or not ready to stand trial, when you leave you:
    a. will go home
    b. return to court
    c. go free
    d. join the army

11. A plea of not guilty means:
    a. you did the crime.
    b. you didn't do the crime.
    c. you're going home.
    d. you're insane

12. A plea of "no contest" means:
    a. you didn't do the crime.
    b. you're insane
    c. the same as guilty
    d. insufficient evidence
13. The main person who helps the defendant during the trial is called:
   a. D. A.
   b. jury
   c. defense attorney
   d. bailiff

14. In a courtroom the person in charge is:
   a. the clerk
   b. the sheriff
   c. the judge
   d. the district attorney

15. The person charged with a crime in a courtroom trial is called the:
   a. D. A.
   b. jury
   c. eye witness
   d. defendant

16. A person with special knowledge who is asked to testify in court is called:
   a. union foreman
   b. an expert witness
   c. a traitor
   d. jury

17. The purpose of cross examination is to:
   a. make witnesses look bad
   b. make people angry
   c. see if you are in good health
   d. get you ready for church

18. The person who testifies in court as to what they saw of the crime is called:
   a. a rat
   b. a traitor
   c. a spy
   d. an eye witness

19. The court-appointed attorney:
   a. works for the CIA
   b. works for the state
   c. works for your family
   d. works for you
20. The defense attorney tries to:
   a. find you guilty
   b. get you less punishment
   c. talk to your family
   d. sue the state

21. The person who defends you is:
   a. the judge
   b. defense attorney
   c. district attorney
   d. prosecutor

22. The number of people on a jury is:
   a. 2
   b. 12
   c. 22
   d. 21

23. The District Attorney works for:
   a. I.B.M.
   b. Xerox
   c. Texas
   d. U.S.S.R.

24. Proving you were insane at the time of the crime will:
   a. send you away for life
   b. prove you not guilty due to insanity
   c. enable you to sue the state
   d. get you a better lawyer

25. The person who generally sets the penalty if you are convicted is:
   a. prosecutor
   b. judge
   c. defense Attorney
   d. chief of police

26. If you are in contempt of court, the judge may:
   a. ask you to be nice
   b. fine your lawyer
   c. fine you
   d. find you guilty
27. The most important person in the courtroom trial is:
   a. sheriff
   b. chief of police
   c. judge
   d. prosecutor

28. Being able to assist your attorney will:
   a. assure your freedom
   b. cure your illness
   c. get you a fair trial
   d. cost you more money

29. The decision of guilty or not guilty is made by the:
   a. prosecutor
   b. defense
   c. bailiff
   d. jury

30. Confidential information from a psychiatric hospital is:
   a. FBI top secret
   b. not released to anyone
   c. good at the race track
   d. found in newspapers

31. Plea bargain may get you:
   a. a better automobile
   b. discounts at the supermarket
   c. a lighter sentence
   d. time in the penitentiary

32. One rule while you are on probation is:
   a. you may have to pay fees
   b. you may not work
   c. you may use street drugs
   d. you may get married

33. Another rule while you are on probation is:
   a. you must be married
   b. you may not drive a car
   c. you may not work
   d. you may not leave the state
34. If the judge sentences you to probation, it means:
   a. hard time
   b. 5-10 years
   c. supervised freedom
   d. county jail time

35. Your talks with your lawyer are secret. The special words meaning secret are:
   a. daily confession
   b. privileged communication
   c. special relationship
   d. close encounter

36. The only person who can make you take the stand and testify is:
   a. Judge
   b. your mother
   c. yourself
   d. your attorney

37. When you plead guilty to a less serious charge, it's called:
   a. no contest
   b. cross examine
   c. privileged crime
   d. plea bargain
APPENDIX D

COMPETENCY RATING FORM
Competency Rating Form

Rater Name: _________________________

Subject Research Number: ____________

Date of Rating: ______________________

Competency Status

Please rate the patient on the following criteria:

1. The patient has sufficient present ability to consult with his attorney with a reasonable degree of rational understanding.

   1  2  3  4  5
   Not true Moderately Very True
   At all True

2. The patient has a rational understanding of the proceedings against him.

   1  2  3  4  5
   Not true Moderately Very True
   At all True

3. The patient has a factual understanding of the proceedings against him.

   1  2  3  4  5
   Not true Moderately Very True
   At all True

I would rate the patients current level of competency as (Please circle):

1 Incompetent

2 Competent
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