

FACTORS ASSOCIATED WITH NEGATIVE OUTCOMES IN COMPETENCY
RESTORATION

A Dissertation

Presented to

The Faculty of the Department of Psychology and Philosophy
Sam Houston State University

In Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

by

Joshua M. Francis

May 2022

FACTORS ASSOCIATED WITH NEGATIVE OUTCOMES IN COMPETENCY
RESTORATION

by

Joshua M. Francis

APPROVED:

Jorge G. Varela, PhD
Committee Chair

Marcus T. Boccaccini, PhD
Committee Member

James W. Crosby, PhD
Committee Member

William N. Gowensmith, PhD
Committee Member

Chien-Pin Li, PhD
Dean, College of Humanities and Social
Sciences

ABSTRACT

Francis, Joshua M., *Factors associated with negative outcomes in competency restoration*. Doctor of Philosophy (Clinical Psychology), May 2022, Sam Houston State University, Huntsville, Texas.

This study investigated the associations between demographic, clinical, and legal variables with negative outcomes in competency restoration (CR), which included ultimate findings of incompetence to stand trial (IST), extensions to length of stay (LOS), and recommitment to CR pre-adjudication. Correlates between competency prong level findings in evaluation reports were examined for associations with defendant measures of performance in treatment. A sample ($n = 250$) was composed of archival data of discharged state hospital patients committed for competency restoration. Average LOS for patients in this sample was 137 days. Commitments were extended for 34% of patients at least once ($n = 86$), and 8% ($n = 20$) were recommitted for CR pre-adjudication. Lower educational attainment and poor participation in competency education were predictive of IST findings and extensions to LOS. Individuals charged with violent crimes were more likely to face extensions to CR commitments. Those who had a history of CR admissions for prior criminal charges, and those who were restrained for dangerous or disruptive behavior during their current admission, were more likely to be recommitted to CR prior to adjudication of their index charge(s). An evaluator opinion of a defendant's inability to comport themselves appropriately in court was significantly linked to poor medication compliance. The implications of these findings are discussed in the context of the existing body of competency related literature, with suggested considerations offered for future studies exploring correlates and predictors of recommitment for competency restoration.

KEY WORDS: Competency restoration, Commitment extension, Re-hospitalization pre-adjudication

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	vii
CHAPTER I: INTRODUCTION	1
Background.....	1
Factors That Influence Opinions of Competence to Stand Trial	4
Defendant Factors That Influence Competency Restoration (CR) Outcomes.....	8
Current Status of Competency Restoration in The U.S.	12
CHAPTER II: CURRENT STUDY.....	14
CHAPTER III: METHOD.....	15
Overview.....	15
Measures	16
Procedure	21
CHAPTER IV: RESULTS	22
Which Demographic, Clinical, and Legal Predictor Variables Were Associated with Negative Restoration Outcomes?	23
Which Indicators of Negative Restoration Outcomes Were Associated with The Evaluator’s Competency Opinion?.....	26
Were Identified Deficiencies in Competency Prongs Consistent Across Admissions?.....	27
CHAPTER V: DISCUSSION	29

General Discussion	29
Variables Associated with Negative Restoration Outcomes	29
Evaluator Opinion and Factors That Influence Restoration Outcomes	31
Observed Competency Deficits and Symptoms Across Admissions	32
Implications	34
Limitations	35
Future Directions	36
Conclusion	37
REFERENCES	39
APPENDIX A	64
APPENDIX B	68
VITA	71

LIST OF TABLES

Table		Page
1	Demographics, Clinical, and Legal Variables	45
2	Results of Independent Samples T-test Comparing Age at Admission and Competency Restoration Outcomes	46
3	Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Competency Opinion at Discharge.....	47
4	Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Extension to Hospitalization.....	49
5	Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Re-hospitalization Pre-adjudication	51
6	Binomial Regressions: Demographic, Clinical, and Legal Predictor Variables and Restoration Outcome Variables.....	53
7	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Factual Knowledge.....	54
8	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Rational Understanding.....	55
9	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Ability to Consult with Attorney	56
10	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Rational Understanding)...	57
11	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Ability to Discuss Facts) ..	58

12	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Legal Strategy Ability).....	59
13	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Understand Adversarial Nature of Courtroom)	60
14	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Conform Behavior in Courtroom)	61
15	Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Testify)	62
16	Patients with Impairments Present at Initial Admission, Initial Discharge, and Readmission before Adjudication (n = 12).....	63

CHAPTER I

Introduction

Background

Competence to stand trial (CST) is an enduring concept that predates the founding of the United States and its legal system. Rooted in 17th century British common law, the issue of a defendant's competence has been recognized as both a procedural matter for court proceedings and a concern for individuals' rights. In U.S. courts, the incompetency plea has been a prominent fixture since the founding of the nation. One of the earliest and best-known cases involved Richard Lawrence, who was found incompetent to stand trial, and later insane, for the attempted assassination of President Andrew Jackson in 1835 (Johnson, 2010). The concept of CST was introduced into U.S. Constitutional law in the late 19th century (*Youtsey v. US*, 1899), in a case in which the conviction was later overturned on appeal with the holding that "the mental capacity of the accused to understand the proceedings against him, and rationally advise with his counsel as to his defense" (p. 944) were fundamental to a defendant's competence.

The modern U.S. conceptualization of CST was not formally defined until more than sixty years later in the landmark U.S. Supreme Court (USSC) case of *Dusky v. U.S.* (1960). The resulting *Dusky* standard stipulated that a defendant must have "sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding and... a rational as well as factual understanding of the proceedings against him" (pp. 402-403). This case clearly drew a distinction between the defendant's capacity and their willingness to understand proceedings against them and assist in their own legal defense. In fact, it is assumed that a defendant is competent, and the burden of

proof lies with the defendant to prove this assumption is untrue in court with a preponderance of evidence. Certain aspects of the language of the ruling were less distinct, leading to questions about what constitutes a “reasonable degree” or a “sufficient present” ability (p. 402). Although the *Dusky v. U.S.* decision has been criticized for its ambiguity and brevity (Weiss, 2002), the two facets expressed in the ruling (i.e., the ability to consult with attorney and understanding of proceedings against them) continue to serve as the foundational prongs of competence to stand trial in the U.S. today. The factual and rational understanding aspects of the second component are sometimes bifurcated into separate prongs of factual legal knowledge and rational understanding, leading to a three-pronged conceptualization of competence to stand trial (Zapf & Roesch, 2008).

The *Dusky v. U.S.* decision served as precedent for several later rulings by the USSC that have further refined the concept and conduct of CST proceedings. Foremost among these cases is *Jackson v. Indiana* (1972), which established limitations on periods of commitment for treatment of incompetent defendants. Specifically, it stated that a defendant found incompetent cannot be committed to restoration (i.e., treatment) for a period exceeding “a reasonable period of time necessary to determine whether there is a substantial chance of his attaining the capacity to stand trial in the foreseeable future” (p. 733). Essentially, this means that the duration of treatment cannot exceed the maximum incarceration sentence of relating to the charge. The defendant must demonstrate continued progress toward restoration of competence, otherwise the defendant has a legal right be released. However, it is important to note that a defendant is not always released back to the community as free citizens. Often, they will subsequently face civil

commitment proceedings if the court determines they cannot be restored to competency within a reasonable period of time and a determination of legal guardianship may also take place during these proceedings.

Competency is a dynamic status that can change over time based on multiple factors. Although a defendant may enter court proceedings competent, “a trial court must always be alert to circumstances suggesting a change that would render the accused unable to meet the standards of competence to stand trial” (*Drope v. Missouri*, 1975; p. 181). This decision followed a trial court’s failure to raise the issue of CST despite evidence that indicated the defendant had demonstrated psychotic behavior and suicidality. Competency is a broad concept that is not limited to one’s ability to stand trial. The USSC have since expanded the presumption and standards beyond CST to apply in all court-related competencies, also known as adjudicative competencies (i.e., CST, competence to plead guilty, and to represent oneself *pro se*), as noted in *Godinez v. Moran* (1993).

Although terminology in the legal statute may vary among various jurisdictions (i.e., CST is sometimes referred to as incompetency to stand trial, or IST), the general definition of competency remains consistent. CST refers to the defendant’s present mental state at the time of criminal proceedings, not their mental state at the time of the alleged crime (Melton et al., 2018). Most state jurisdictions have adopted the criteria set forth in *Dusky v. U.S.*, or some variation thereof, as their standard for determining competence to stand trial. When an individual is ruled incompetent, the court has determined that they are “mentally absent from the proceeding” (Weiss, 2002; p. 158) regardless of their physical presence in the courtroom.

In the State of Texas, where this study was conducted, the standard for CST is detailed in Article 46B of the Texas Code of Criminal Procedure (2004). Consistent with decision in *Dusky v. U.S.*, defendants are presumed competent, and a preponderance of evidence is required to prove incompetence (para. 46B.003). The language of Article 46B is also written in keeping with the *Dusky* criteria, enumerating the concepts of factual knowledge, rational understanding, and the defendant's ability to consult with their attorney. The Texas Criminal Code further delineates subsumed facets within those prongs to be considered in an evaluation of competence and the related report. These factors include the defendant's ability to engage in a reasoned choice of legal strategies and options, understand the adversarial nature of criminal proceeding, exhibit appropriate courtroom behavior, and testify (para. 46B.024). The Texas statute also suggests other factors to be considered in an opinion, including the defendant's potential for restorability and the need for medication to restore or maintain competence.

Factors That Influence Opinions of Competence to Stand Trial

The issue of a defendant's competency to stand trial evaluations may be raised by the defense, the prosecution, or directly by the courts. Courts will subsequently appoint an evaluator to assess the defendant's psychol-legal abilities and will also require an assessment report be produced. It is estimated that approximately 91,000 competency evaluations were conducted in the United States in 2019 (Kois et al., 2020). As cited in the same text, the question of competency is raised in 10 to 15% of criminal defendant's cases, and it is typically done by their defense attorney. Most of these defendants who are evaluated are later determined to be competent to stand trial and their criminal case will subsequently proceed in court (Nicholson & McNulty, 1992).

Despite established criteria that are rooted in USSC case precedent, there is surprising variability among the evaluators' opinion rates in competency evaluations. In a metaanalysis of the published research from 1967 to 2007, the base rate of evaluator opinions of incompetence to stand trial (IST) was found to be 27.5% nationwide (Pirelli, Gottdeiner, & Zapf, 2011). In a more recent study that reviewed 3,644 court-ordered CST evaluation reports, the base rate of IST opinions was found to be substantially higher at 38.8% (Murrie, Gardner, & Torres, 2020). This study found a staggering degree of variability in the rates of incompetency opinions among 126 evaluators, ranging from 9.1% to 76.8%. Opinion rates were also found to vary significantly based on whether it was an initial evaluation or a follow up to inform post-restoration decisions. Murrie et al. concluded that some of this variability in forensic opinions was reflective of the evaluation reports that did not meet professional standards and statutory requirements, despite CST evaluations ostensibly conducted in accordance with state level guidelines. Although somewhat outside of the scope of this study, individual differences in evaluator related factors have been found to influence outcomes in matters of competency. There are indications that evaluator related factors, particularly professional discipline, may also influence evaluators' opinions (Murrie, Boccaccini, et al., 2008).

In terms of defendant related variables, which are the focus of this study, there are many factors that have been found to increase the likelihood of a defendant being found incompetent. The defendant-specific factors of interest to this study that are known to influence incompetency determinations generally fall within three categories of sociodemographic, psychiatric, and criminological variables. Among the sociodemographic factors, there does not appear to be significant differences between

rates of competency findings between male and female defendants (Kois et al., 2013). However, increased rates of incompetency have been associated with individuals who are unmarried and slightly older than those found competent (Pirelli, Gottdeiner, & Zapf, 2011). Similarly, a defendant's level of educational attainment has been found to not be directly associated with competency determinations (Cooper & Zapf, 2003).

Socioeconomic status, however, does appear to have many secondary effects to IST determinations. In comparison to defendants with private attorneys, those who were represented by a public attorney tended to be younger and less educated, and they were more likely to be found incompetent (Linhorst et al., 2017). Unemployment status has also repeatedly been found to predict a finding of incompetence to stand trial, nearly double the rate of the competent defendants (Pirelli, Gottdeiner, Zapf, 2011; Cooper & Zapf, 2003).

Ethnicity of the defendant has repeatedly been found to be a significant predictor of opinions of incompetency. Ethnic minority status has been associated with increased likelihood of a defendant being found incompetent (McCallum et al., 2015; Pirelli, Gottdeiner, & Zapf, 2011; Hubbard, et al., 2003). Although racial biases do not appear to influence attorney decisions to refer defendants for CST evaluations (Harris & Weiss, 2018), significant differences reflective of racial biases have been found in evaluator opinions of the defendant's competence. For instance, the question of mental illness is less likely to be raised for Spanish-speaking defendants by their defense attorneys, and thus less likely to be referred for evaluation of their competence than their English-speaking counterparts (Varela et al., 2010). African Americans are more likely to be assessed to have a mental disease or defect (per the *Dusky* standard phrasing), especially

with regard to psychotic disorders, and they are more likely to be in jail at the time of the evaluation (Dirks-Linhorst et al., 2018).

Psychiatric variables have long been the focus of research concerning correlates of competency findings. Intellectual disability and impaired mental status have each been associated with findings of incompetence to stand trial (Gay, Ragatz, & Vitacco, 2015). Defendants who evidence psychotic symptoms, or related diagnoses, are substantially more likely to be found incompetent (Gay, Ragatz, & Vitacco, 2015; Pirelli, Gottdiener, Zapf, 2011; Hubbard, Zapf, & Ronan, 2003). Severity of psychotic symptoms also predicts competency outcomes (Gay, Vitacco, & Ragatz, 2017). However, defendants with a nonpsychotic disorder are still almost six times more likely to be found incompetent (Cooper & Zapf, 2003). Any indication of substance use disorder diagnoses was found to be associated with decreased likelihood of being found of incompetent. Defendants with a history of previous psychiatric hospitalizations are significantly more likely to be found incompetent (Dey et al., 2016; Pirelli, Gottdiener, Zapf, 2011; Hubbard et al., 2003). In terms of specific competency prong related deficits, impaired rational understanding, and the inability to consult with an attorney have been associated with certain psychotic symptoms (i.e., delusions), whereas impaired factual understanding has been linked to intellectual disability and other psychotic symptoms (i.e., thought derailment; Gay, Ragatz, & Vitacco, 2015).

There is a substantial body of research examining criminological and other psycholegal variables as predictors of incompetence findings. Criminal offense history and prior incarcerations have been associated with findings of incompetence (Cooper & Zapf, 2003). Defendants facing violent criminal charges are significantly more likely to

be found competent than those facing non-violent charges (Pirelli, Gottdeiner, and Zapf, 2011; Cooper & Zapf, 2003). In their meta-analysis, Pirelli et al. also found that a history of prior competency evaluations does not affect evaluator competency opinion rates. Mentally ill defendants represented by a public defender were more likely be jailed at the time of their evaluation, deemed incompetent, and ordered to hospitalization pending trial (Linhorst et al., 2017).

Defendant Factors That Influence Competency Restoration (CR) Outcomes

Once an individual is adjudicated incompetent, their criminal case proceedings are essentially suspended. Although the court may choose alternative options to prosecution, this typically occurs in instances where the defendant is a first-time offender or is facing low level charges. More commonly, the defendant is committed to some form of competency restoration treatment for their underlying conditions that were linked to the finding of incompetency. This generally involves inpatient psychiatric treatment, jail-based restoration programs, or outpatient restoration services. Assignment to these various forms of treatment is often limited by the availability of programs in the local state facilities and surrounding communities. There is often a lack of community based alternative options to inpatient competency treatment (Miller, 2003), and beds are limited in psychiatric facilities. Outpatient competency restoration has been established as a clinically effective solution to this systemic problem (Gowensmith et al., 2016), particularly in cases where the defendant may not require hospitalization for treatment and may not represent a public safety risk. In a recent study examining state level outpatient competency restoration initiatives, 35 states were found to have specific statutes identifying and sanctioning such programs, but only 16 of those states had actual

programs in place (as cited in Melton et al., 2018). Outpatient competency restoration programs continue to proliferate across the U.S., as cost-effective alternatives to inpatient treatment that expand the availability of services.

There is great variability among state level statutes regarding competency treatment nationwide, and there are even more differences in how states have implemented related programming guidelines. Maximum time limits for confinement and guidelines for dismissal of charges for non-restorable individuals are among the most prominent of these concerns. An increase in demand for a finite number of inpatient competency restoration beds, has resulted in waitlists of several months to a year for forensic patients nationwide (Shannon, 2017). Many states have faced lawsuits concerning these issues (Gowensmith, 2019; Heilbrun et al., 2019; Warren et al., 2013), based in the premise of violating individuals' constitutional due process rights.

Administration of psychotropic medication is generally the primary treatment avenue for restoring competence, particularly in cases where the defendant is experiencing psychotic symptoms (Heilbrun et al., 2019; Melton et al., 2018; Zapf & Roesch, 2008). Most incompetent defendants engage in psychiatric treatment while awaiting CST evaluations, which often leads to improved mental status in jail and findings of competence by the time the evaluation is conducted (Fitch & Steinberg, 2003). Per *Riggins v. Nevada* (1992), courts are required to weigh the benefit of medication with consideration of potential adverse side effects that may further degrade a defendant's competency related abilities. *Sell v. United States* (2003) was a more recent USSC ruling, which held that individuals may be ordered to involuntary psychiatric treatment if it is medically appropriate and necessary, it is likely to be effective, and it is

unlikely to have detrimental effects to the defendant's competency related abilities. This USSC decision has since been interpreted to mean that individuals who are a danger to themselves or others may be involuntarily committed for treatment, as can individuals who are deemed incompetent to make medical decisions (Melton et al., 2018).

Many of the same factors that have been found to influence competence opinions (i.e., the sociodemographic, psychiatric, and criminological variables previously discussed) are also associated with negative treatment outcomes in competency restoration. In terms of demographic features that predict non-restoration status, individuals who are single or never married are at greater risk (Mikolajewski et al. 2017), and individuals who were not restored also had significantly fewer years of education (e.g., they were less likely to have graduated from high school). Mikolajewski et al. found that other demographic variables, such as age, gender, race, and employment history, did not predict negative treatment outcomes.

Psychiatric variables that predict poor outcomes in competency restoration are well established in the existing literature. As was the case with initial findings in IST evaluations, psychotic symptoms are a strong predictor of negative competency restoration outcomes (Gay, Vitacco, & Ragatz, 2017; Morris & Deyoung, 2012). As psychotic or manic symptoms increased in number, the likelihood of successful restoration of competence decreased, per the findings of Gay et al. A diagnosis of intellectual disability (ID) is also strongly associated with negative outcomes in competency restoration (Heilbrun et al., 2019; Gay, Vitacco, & Ragatz, 2017; Morris & Deyoung, 2012). ID defendants who present with comorbid mental illnesses are also more likely to have negative restoration outcomes (Mikolajewski et al., 2017). Certain

neuropsychological symptom presentations (e.g., impaired mental status or executive functioning) have been found to predict non-restoration (Gay, Vitacco, & Ragatz, 2017). A history of prior psychiatric hospitalization is also linked to increased risk of non-restoration (Morris & Deyoung, 2012). Conversely, substance use disorders and personality disorders have been found to be predictive of restoration success (Morris & Deyoung, 2012). In a recent study concerning psychiatric predictors of length of stay in competency restoration, externalizing behaviors were found to have adverse effects on final restoration determinations (Grossi et al., 2018).

With respect to the legal variables of interest, revocation of conditional release has been associated with negative restoration outcomes (Mikolajewski et al., 2017). In that same study, success in competency restoration was not related to defendant's age at first offense, their number of previous arrests, or their type of charge (i.e., violent vs. non-violent). The defendant's ability to demonstrate psycholegal abilities, those rooted in the prongs established in the *Dusky* standard, is predictive of success in competency restoration (Morris & Deyoung, 2012). Morris and Deyoung argued that the psycholegal abilities form a continuum of increasing predictive ability, beginning with appropriate behavior comportment in the courtroom, continuing to factual legal understanding, and concluding with rational assistance to their attorney. In another study that compared both psycholegal comprehension and psychiatric symptoms pre and post competency restoration treatment, individuals who were not ultimately restored consistently scored lower on formal measures of psycholegal comprehension (i.e., before and after treatment) and global functioning (Advokat et al., 2012). The competent and incompetent groups did not differ in terms of any other psychiatric or demographic variables.

Current Status of Competency Restoration in The U.S.

State level policies and available programs pertaining to competency restoration have evolved over the past decade in the U.S. Corresponding with a rapidly increasing number of referrals for competency evaluations in the U.S., the demand for restoration services has also been rising at an unprecedented rate. This growing demand has left states struggling to effectively resource and accommodate the needs of the system (Gowensmith, 2019). Most of the existing literature on restoration, which spans nearly 40 years, has compared competent defendants to those found incompetent based on demographic characteristics, psycholegal factors, and clinical (i.e., psychiatric) variables (Pirelli & Zapf, 2020). Just as competency restoration has evolved in the US, the demographics of the country continue to change over time.

Variables associated with negative competency restoration outcomes have been largely understudied, and the existing literature has primarily examined length of stay (LOS) in a forensic hospital and ultimate findings of non-restorability. In their 2020 study, Pirelli and Zapf noted a lack of substantive research involving retrospective analysis comparing restored and non-restored groups. Pirelli and Zapf also highlighted a gap in the literature regarding factors that may have moderated or otherwise influenced competency restoration outcomes.

Most defendants initially found to be incompetent are successfully restored, and the typical duration of hospitalization is relatively short (Nicholson & McNulty, 1992). In fact, the base rate of successful restoration in the U.S. is 81%, and the median length of stay for a defendant in inpatient competency restoration is 147 days (Pirelli and Zapf, 2020). Defendants are periodically reassessed for their related abilities while in

competency restoration, the schedule for which is based on the applicable statutes of the local state jurisdiction. Today, most competency restoration occurs in forensic hospital settings (Heilbrun et al., 2019), after which restored (i.e., competent) defendants are returned to correctional facilities to await trial. However, many of these individuals will decompensate shortly after their return to jail (Finkle et al., 2009) because correctional facilities are fundamentally inadequately suited to manage and treat mental health disorders (Smith, 2018; Munetz et al., 2001). Once again deemed incompetent to stand trial, the defendant is ordered to undergo competency restoration once again in a “cycle of decompensation and restoration” (p.328).

CHAPTER II

Current Study

Despite expansive literature on competency related topics, it has mostly addressed characteristics of individuals engaging in restoration; not the variables associated with final restoration status (Pirelli et al., 2011). Negative treatment outcomes, which include protracted LOS, re-hospitalization pre-adjudication, and ultimate findings of non-restorability, were of particular interest in this study. Factors that lead to re-hospitalization are particularly understudied in the literature, and they were the primary focus of the current study. The link between specific, CST prong level findings in initial evaluations to negative restoration outcomes were also an area of central focus to this study.

Research Questions

1. Which demographic, clinical, and legal variables were associated with negative restoration outcomes (i.e., pre-adjudication re-hospitalization, length of stay (LOS), and restorability finding)?
2. Were the competency-related abilities from the initial pretrial CST evaluation associated with variables known to lead to negative restoration outcomes (i.e., need for physical restraint, medication compliance, participation in competency restoration programming)?
3. For individuals who were recommitted for competency restoration prior to adjudication of their index offense, were the noted impairments to competency-related abilities consistent across admissions?

CHAPTER III

Method

Overview

This study was a retrospective analysis of the inpatient competency restoration (CR) population. A sample of 250 discharged patients was coded from archival data, which included both electronic medical records and the pretrial competency evaluation reports of discharged (i.e., former) state hospital patients. Texas Health and Human Services Commission (HHSC) did not have an existing database of consolidated state hospital clinical data and there was no central repository of hard-copy state hospital treatment records. Rather, the ten state hospitals retained hard copies of patient preadmission records at their respective sites, which included CST evaluation reports conducted in the community that lead to admission for inpatient competency restoration. Due to practical and logistical limitations, the researcher requested records from the state hospital site that was co-located with the Texas HHSC campus. This project was approved by the Institutional Review Boards (IRB) of both HHSC and Sam Houston State University (SHSU).

HHSC generated a list of CR patients for this study that contained the most recently discharged individual and continued in reverse chronological order based on discharge date until the desired sample size was achieved. HHSC administrative staff scanned hard-copy competency evaluation reports into a digital database that was only accessible by the researcher from an HHSC computer terminal. Current (i.e., active) patients and those who did not complete treatment due to reasons unrelated to treatment (e.g., death or administrative transfer) were excluded from this study by HHSC per the

researcher's request. Sample demographic and basic descriptive data are provided in Table 1.

Insert Table 1 about here

Measures

No formal assessment measures or instruments were used in this study. Three general categories of predictor variables were coded for this study: demographic information, clinical treatment data, and legal/competency related data. Missing items were coded as “.” To facilitate use of the SPSS system missing function in data analyses. The term “index hospitalization” refers to the most recent hospitalization from which they were discharged at the time this study was initiated.

Demographic Information

This data was collected from patient administrative data in electronic medical records. The one predictor in this dataset that was a continuous variable was age at admission ($M = 39$, $SD = 12.63$), which was within the acceptable range for parametric procedures in terms of skew, kurtosis, and homoscedasticity. The remaining demographic variables were all categorical. Relationship status, employment status, and housing status were each consolidated into dichotomous variables and coded as present/active (1) or not present (0) at the time of arrest (see Table 1 for distribution of demographic data.)

Clinical Treatment Data

This information was coded from case worker summary notes in electronic medical records that were written periodically over the course of the patient's treatment.

History of Psychiatric Hospitalizations. Information about the patient's history of both general psychiatric hospitalization and forensic hospitalizations (i.e., for competency

restoration) were collected. These variables were coded based on the number of known prior admissions the patient noted in the patient's history (0 = none, 1 = one prior, 2 = multiple prior hospitalizations). This information was taken from multiple sources of information, including the electronic medical records and their competency evaluation report. Prior hospitalizations were distinguished from re-hospitalizations based on their occurrence prior to the index hospitalization. For logistic regression analyses, the reference group was "none" (i.e., 0), or no prior hospitalizations.

Medication Compliance. This variable was derived from the medication administration record (MAR) in the patient's electronic medical records. Data was recorded based on whether the defendant was consistently taking prescribed psychotropic medication during their index admission for inpatient competency restoration. The variable was coded as dichotomous (0 = not fully compliant with medication, 1 = compliant with prescribed psychotropic medication).

Attendance in Group Competency Restoration (CR) Classes. This variable was coded to examine the patient's engagement in CR treatment. Information about the patient's attendance in weekly competency restoration groups was taken from case worker summary notes pertaining to the index hospitalization and discharge evaluation reports conducted by staff psychologists. This variable was quantified based on the number of sessions the patient attended versus the number they refused or declined to attend. Attendance was coded as "did not attend any CR groups" (0), "partially attended"

(1), and “fully attended” (2). For logistic regression analyses, the reference group was “did not attend any CR groups” (i.e., 0).

Need for Physical Restraint. This variable was collected to examine if disruptive or dangerous behavior was noted in the patient’s file that escalated to the point of requiring staff to restrain the patient for safety. The information was taken from case worker summary notes and discharge evaluation reports conducted by staff psychologists. Because the specific count of patient restraints and behavioral incidents was not consistently tracked or recorded in the electronic medical records, this was coded as a dichotomous variable (0 = no restraints, 1 = patient was restrained).

Legal/Competency Related Data

This data was collected from the pretrial competency evaluation reports that lead to court-ordered commitment for competency restoration for the index offense. Discharge evaluation reports, and available interim evaluation reports were also coded using this same methodology. Those whose charges were dismissed prior to administration of a discharge evaluation ($n=63$) were coded as missing data.

Index Crime Category. Each criminal charge was initially coded as a nominal variable by charge, as cited in the evaluation report. This information was also confirmed in the electronic medical records. These variables were later categorized into basic charge types (e.g., violent, drug, property, statutory crimes). The highest level of charge was coded for this variable where multiple charges were present. Due to the limited frequency of offenses in certain categories, offenses were ultimately collapsed into violent ($n = 128$, 51.2%) offenses and non-violent offenses ($n = 122$, 48.8%). Violent offenses (e.g., murder or assault), was operationalized to include related offenses (i.e., attempted or

threatened physical harm, and sex offenses). Criminal charges were coded as “violent” (0) and “non-violent” (1).

Evaluator Opinion – Dusky Criteria Variables. Factual knowledge, a dichotomous variable, was coded to reflect whether the evaluator found the defendant to not have factual legal knowledge (0) or demonstrating satisfactory factual legal knowledge (1). Rational understanding was coded from the evaluator’s opinion of the defendant’s demonstrated rational understanding of legal proceedings (1) or not (0). Ability to consult with attorney was also a dichotomous variable taken from the Dusky criteria denoted the evaluator opinion of the defendant’s ability to work with their attorney (1) or inability to do so (0).

Evaluator Opinion – Texas Statute Variables. Rational understanding was coded to reflect whether the evaluator found the defendant demonstrated a rational understanding of legal proceedings (1) or not (0). Ability to discuss facts reflected the evaluator opinion about the defendant’s demonstrated an ability to discuss facts pertinent to their legal case proceedings (1) or not (0). Legal strategy ability was a dichotomous variable speaks to the defendant’s ability to work with their attorney (1), or inability to do so (0). Understand adversarial nature of courtroom, also coded from the Texas competency statute, noted the evaluator’s assessment of the defendant’s understanding of the adversarial nature of court proceedings (1) or the absence thereof (0). Conform behavior in courtroom recorded the defendant’s ability to conform their behavior appropriately in the courtroom setting (1), or not (0). Finally, the sixth Texas statute related variable (i.e., testify) was coded to reflect whether the evaluator found the defendant evidenced the ability to testify in their court proceedings (1) or not (0).

Evaluator Opinion – Symptoms Present. For the third research question, psychiatric symptoms observed by the evaluator were coded from each competency evaluation period (i.e., pre-admission, mid-treatment, and discharge) for those cases where patients were re-hospitalized pre-adjudication ($n = 20$). These variables were coded dichotomously as absent (0) or present/observed (1). Of note, the “other” category was used for less commonly noted symptoms (i.e., flat affect). Diagnoses were not mutually exclusive, meaning those with multiple symptoms present were coded in multiple categories. The psychiatric symptom variable categories and their frequencies can be found in Table 16.

Outcome Variables

All the outcome variables for the first research question (e.g., competency status at discharge, re-hospitalized pre-adjudication, and extensions to length of stay) were coded as dichotomous variables (i.e., no = 0 and yes = 1). *Competency status at discharge* was coded to reflect a final opinion of competent (i.e., CST) or incompetent (i.e., IST). *Re-hospitalization pre-adjudication* specifically reflected if the patient was recommitted for competency restoration for the same (i.e., index) offenses(s) prior to adjudication of those charges. *Extension to length of stay* was defined as any court ordered extension to the period of competency restoration following the initial commitment, as stipulated in Article 46B.080 of the Texas Code of Criminal Procedure. Per the Texas statute regarding commitment competency restoration (Article 46B.073), initial commitments for misdemeanor charges are for no more than 60 days, and felony charge related initial commitments may not exceed 120 days.

Procedure

A researcher designed coding sheet (see Appendix A) was used to code and deidentify demographic, clinical, and legal data from patient records on site at the state hospital campus where clinical privileges and access patient records had been granted. The researcher also coded data from the scanned pretrial CST evaluation reports on site onto the same record form. All data was derived strictly from patient records. No formal measures were used in this study.

The researcher recruited a fellow senior graduate student with clinical privileges at the same state hospital site to serve as a data coder for this project. The researcher conducted a test of interrater reliability at the outset of this project. After the coder was trained in the use of the coding form, two practice cases were coded by the researcher and the graduate student data coder. Interrater agreement was reliably established after reviewing the two coded cases. Agreement was 93% for the first case. After a review of the minimal discrepancies that were based on discrepant source of data within the electronic medical record, there was 100% agreement between evaluators on the second case. Overall, interrater reliability was excellent across all variables (percent agreement = 96.5%). Following reliability testing, cases were coded by single rater. The researcher reviewed the first five cases completed by the data coder and found no errors on the record forms.

CHAPTER IV

Results

After data were screened, no cases were removed from the sample prior to conducting preliminary analyses. Missing data across variables were examined using the SPSS Missing data function. Cases with missing data were omitted listwise for each analysis using this integrated feature of SPSS. Of note, several patients were discharged prior to receiving a final evaluation of competency because their charges were dropped ($n = 63$). These discharge evaluations were coded as missing for the purposes of analyses, as opposed to coding them as an addition (favorable) outcome category, in order to permit inclusion of these cases for analyses where data fields were present.

Regarding the three negative restoration outcomes that were the focus of this study, additional data pertaining to other unfavorable outcomes for defendants emerged. Nearly half of the individuals found to be incompetent at discharge in this sample were specifically noted to be non-restorable ($n = 29$). Ten patients (4% of the total sample) were discharged to community based (i.e., outpatient) competency restoration programs for additional treatment pre-adjudication and their ultimate competency statuses were unknown. Additionally, 22 patients (8.8% of the sample) transitioned from competency restoration commitments to civil commitments following ultimate opinions of incompetence to stand trial.

Which Demographic, Clinical, and Legal Predictor Variables Were Associated with Negative Restoration Outcomes?

Prior to conducting the multivariate analyses for hypothesis testing of predicted associations, univariate correlation analyses were run among the variables of interest. Independent samples t-tests were conducted to compare age at admission with each of the three competency restoration outcomes of interest to this study. Age was first examined as a distinguishing variable in final restoration opinion (i.e., competent, $n = 142$ or incompetent, $n = 75$). Next, age at admission was used as a basis of comparison between patients who were extended ($n = 149$) and those who were not ($n = 101$). Third, admission age of patients who were re-hospitalized ($n = 20$) versus those who were not ($n = 230$) was also analyzed. No individual predictors were found to be significant in any of the t-tests modeled in this study (see Table 2).

Chi-square analyses were run to compare the remaining predictor variables with the three outcome variables. Restoration opinion at discharge (i.e., competent, or incompetent) was significantly associated the following variables: education (Cramer's $V = .19$, $p = .04$), and competency education group (Cramer's $V = .24$, $p = .002$), and index crime ($OR = 2.3$, $p = .004$). There were no other predictors in this model found to be significantly associated with the outcome variable (see Table 3).

 Insert Table 2 and 3 about here

Average length of stay (LOS) for the overall sample was 136.5 days. For misdemeanor offenders, whose initial commitments were for 60 days per the Texas

statute, the average LOS (i.e., 100 days) was shorter than the average for patients facing 120-day initial commitments for felony level charges (i.e., 153 days). A substantial portion of the sample had their initial commitment extended at least once ($n = 86$) or multiple times ($n = 63$). Among the predictors compared with extension to hospitalization, education (Cramer's $V = .23, p = .005$) and competency education group attendance (Cramer's $V = .24, p = .001$) emerged as significant at the bivariate level. Results indicated no other significant relations among the predictor variables of interest and extension to the court-ordered term of hospitalization (see Table 4).

Chi-square analyses were also run to examine if recommitment for competency restoration pre-adjudication was associated with the predictor variables of interest. Results indicated that a history of prior competency restoration admissions (Cramer's $V = .23, p = .001$) was significantly related with re-hospitalization. Additionally, re-hospitalization was correlated with the need to be restrained by hospital staff ($OR = 2.77, p = .02$). There were no other individual predictors found to be significant in this model (see Table 5).

 Insert Table 4 and 5 about here

Multivariate analyses of the predicted variable associations were conducted using only those predictors found to be significantly correlated with the aforementioned dichotomous outcome variables. First, a binomial logistic regression was performed to ascertain the effects of education, group competency participation, and violent criminal charge on the likelihood that an individual would be found incompetent to stand trial

(IST). The logistic regression model was statistically significant, $\chi^2(6) = 29.85, p < .001$, Nagelkerke $R^2 = .179$. The model correctly classified 69.6% of cases. All three of the predictor variables were statistically significant in this model (see Table 6). Individuals who attended some college had 2.97 times lower odds to not be restored to competency at discharge when compared to those who did not graduate high school. Those who fully attended competency education groups were 5.08 times less likely to be found incompetent than those who declined to attend these groups. Individuals who had any pending violent criminal charges were .37 times less likely to be found incompetent than those with strictly non-violent charges pending.

In the second binomial logistic regression model, the effects of education level and participation in competency education groups on the likelihood of extensions to hospitalization were examined. This logistic regression model was also statistically significant, $\chi^2(5) = 23.17, p < .001$, Nagelkerke $R^2 = .122$, and it correctly classified 64.1% of cases. Both predictor variables were statistically significant in this model (see Table 6). Individuals who attended some college had 2.49 times lower odds of avoiding hospitalization extensions, as compared to those who did not graduate high school. Those who fully attended competency education groups were 3.23 times less likely to have their term of hospitalization extended than those who did not attend these groups.

A third binomial regression was conducted to evaluate the effects of prior competency restoration admissions and the need for restraint during the current hospitalization on the likelihood the individual was re-hospitalized prior to adjudication of their index (i.e., current) charges. This logistic regression model was also statistically significant, $\chi^2(2) = 13.10, p < .001$, Nagelkerke $R^2 = .119$, and the model correctly

classified 92% of cases. As in the previous models discussed, all predictor variables were statistically significant to the model (see Table 6). Individuals who had been hospitalized for competency restoration previously in their lifetime were 4.5 times more likely to be re-hospitalized than those with no history of prior competency restoration hospitalizations. Individuals who were restrained during their index (i.e., current) hospitalization 2.6 times more likely to be re-hospitalized than those who were not restrained. Regression coefficients and standard errors for each of the three regression models can be found in Table 6.

Insert Table 6 about here

Which Indicators of Negative Restoration Outcomes Were Associated with The Evaluator's Competency Opinion?

To screen for significant associations between variables of interest for inclusion in subsequent multivariate analyses of hypothesized associations, bivariate analyses of predictor and outcome variables were run. Chi-square analyses were once again chosen to compare clinical treatment variables associated with negative restoration outcomes and evaluator opinions of competency abilities. The clinical treatment variables included as predictors of restoration outcomes in this question were the need for physical restraint, medication compliance, and participation in group sessions of competency education. As for outcome variables, the six areas of competency that are assessed under the Texas statute were also examined in addition to the three competency prongs adapted from the Dusky criteria. In this model, none of the predictors were significantly associated with

the three competency prong outcome variables (see Tables 7-9). However, poor medication adherence was found to be correlated with one of the Texas statute-related competency abilities (i.e., ability to conform behavior in the courtroom; Cramer's $V = 3.02, p = .04$; see Table 14). There were no other predictors found to be significantly related to courtroom behavior or any of the other outcome variables from the Texas statute at the bivariate level (see Table 10-15). Based on the bivariate level findings, no multivariate analyses were warranted to further explore this research question.

Insert Tables 7 through 15 about here

Were Identified Deficiencies in Competency Prongs Consistent Across Admissions?

As noted in the results of first research question, only 20 individuals (8%) of the total sample ($n = 250$) were readmitted for competency restoration prior to their index offenses being adjudicated. Three of these 20 individuals were re-hospitalized a second time, and one those was also re-hospitalized a third time prior to adjudication of their offense in court. Ultimately, half of the re-hospitalized patients in this sample were found competent at discharge ($n = 10$). Seven of the re-hospitalized patients were found incompetent, and the remainder had charges dismissed and were discharged without a final competency evaluation ($n = 3$).

The sample data did not support running analyses to answer this final research question. Eight of the 20 re-hospitalization cases did not have the requisite competency reports available to be coded (i.e., competency reports from their initial admission,

readmission, and most recent discharge). This resulted in an available sample of 12 individuals for the purposes of analyses to explore the hypothesized associations.

Descriptive statistics were run to examine data concerning the characteristics of these complete cases of re-hospitalization ($n = 12$). In addition to the three fundamental competency prongs and six facets of the Texas statute pertaining to competency, interfering psychiatric symptoms were examined across periods of evaluation for competency (i.e., at each admission and at final discharge). Data are presented in table form to depict which aspects of incompetency, and which interfering symptoms, were identified as present at different evaluation periods (see Table 16.)

Insert Table 16 about here

CHAPTER V

Discussion

General Discussion

This study explored the links between demographic, clinical, and legal variables to negative outcomes in competency restoration. In addition to the extensively researched topics of extensions to hospitalization and ultimate findings of non-restorability, readmission prior to adjudication of the criminal offense was of particular interest to this study. The primary objectives were to examine (a) which variables were associated with these negative outcomes, (b) how noted areas of impairment in pre-trial evaluator opinion related to indicators of poor restoration outcomes, and (c) the consistency of impairments noted by evaluators across admissions for those who were readmitted for competency restoration pre-adjudication. Results of this study were largely consistent with the existing body of competency literature. Overall, the results of this study answered the primary research question(s) and provided insight and data to inform the future exploration the third question.

Variables Associated with Negative Restoration Outcomes

Several significant associations emerged that linked hypothesized predictors to negative outcomes in competency restoration. Consistent with prior findings on the subject (Mikolajewski et al., 2017; Kois et al., 2013), education was the sole demographic variable found to be associated with negative restoration outcomes in this study. Individuals who did not graduate from high school were more likely to have their hospitalization extended for additional competency restoration, and they were more likely to ultimately be found incompetent. Similarly, those who did not participate in

competency education were substantially more likely to have their hospitalization extended and to ultimately be found incompetent. Additionally, the nature of the individual's pending legal charge was also a factor uniquely associated with the ultimate competency finding. The finding in this study that individuals who were charged with violent offenses were less likely to be found incompetent is supported by previous findings established in the literature (Pirelli, Gottdeiner, and Zapf, 2011; Cooper & Zapf, 2003). This indicates that state-specific criminal justice policies may be generalizable to other jurisdictions, and thus are reflective of larger societal expectations for retribution or punishment of severe crimes. Taken together, these results illustrate how multiple factors are linked to poor outcomes in restoration, and are associated with longer periods of hospitalization in general.

Novel findings emerged in this study identifying clinical factors that are associated with readmission for competency restoration prior to adjudication of criminal charges. Individuals with a history of prior competency restoration admissions (i.e., predating their index offense) were markedly more likely to be readmitted more than once for competency treatment relating to the same index charges. This finding expands upon existing literature that has identified a link between prior psychiatric treatment history and likelihood of being ultimately found incompetent during current CR admission (Pirelli, Gottdiener, Zapf, 2011; Hubbard, Zapf, & Ronan, 2003). Those whose behavior during their index hospitalization resulted in the need for physical restraint were also more likely to have been re-hospitalized pre-adjudication. This supports the related finding that externalizing behavior in inpatient treatment can have adverse effects on ultimate competency determination (Grossi et al., 2018), in that these results

demonstrated how externalizing behavior can increase the likelihood of repeated admissions for competency restoration.

Evaluator Opinion and Factors That Influence Restoration Outcomes

The results of this study partially answered the research question examining the link between evaluator opinions and the factors that affect restoration outcomes, and some interesting insights became evident. No significant associations were found between the evaluator's opinion of the defendant's psycholegal abilities under the three-pronged *Dusky* model of competency. Overall, there was markedly little detail and variability in evaluator's assessment of deficits in competency prongs. Further, evaluators did not always comment on non-restorability. This is consistent with recently published research concerning competency evaluations reports that do not speak to all aspects of competency cited in statutory requirements or standards of the professions (Murrie et al., 2020). The results of this study underscore the prevalence of this issue in psycholegal reports.

However, a significant finding emerged when the associations between evaluator opinion and competency restoration treatment variables were instead examined using the variables of the Texas state statute. Individuals identified by evaluators to have poor ability to appropriately comport their behavior in a courtroom (under the Texas statute) were more likely to evidence poor medication compliance in competency restoration. As previously noted, the statute further delineates the concept of competency into a six-faceted model that provided a more detailed picture of the areas of impairment. These results support the argument for use of a more dimensional approach than what is offered in the three-pronged model, something akin to the continuum hypothesized by Morris and

Deyoung (2012), in order to examine links between competency evaluator opinion and restoration outcomes.

Observed Competency Deficits and Symptoms Across Admissions

This study also sought to examine the consistency of symptoms and impairments present across evaluation periods for those individuals who were readmitted to inpatient competency restoration. There were several limitations to this study that impeded the ability to answer this question. In addition to the issues concerning lack of detail in evaluation reports, the researcher did not have access to all the available CST reports. This included reports pertaining to prior pretrial evaluations as well as those conducted at each respective discharge. In many cases, there was no information speaking to whether an individual had ever been found competent during their prior admission(s). This is an important data point, as a readmitted patient with a prior history of successful restoration would reasonably be considered to have a more positive prognosis in treatment during their current admission than someone who had never been restored in any of their prior admissions for competency restoration.

Although most individuals were discharged back to county jail to await trial, this was not always the case. It is unclear how many individuals may have discharged to the community instead to await resolution of their court cases. Further, data mentioning any out of state forensic hospitalizations was typically limited to minimal collateral documentation or patient self-report. The fact that the ultimate outcomes in legal cases were unknown further complicated the ability to make conclusive statements regarding re-hospitalization. The study sample included patients who had discharged from the state

hospital system prior to December 1, 2020, and administrative and pandemic related restrictions postponed data collection to several months after this date.

Although conclusive answers were not found regarding the third research question, the results provided important data that further inform the collective understanding of individuals who are readmitted for competency restoration before their legal case is concluded in court. The rate of re-hospitalization found in this study was 8%. This is likely a minimal estimate of the true rate of re-hospitalization, as several patients in this sample were readmitted for competency restoration treatment after the index hospitalization (i.e., prior to closure of their (index) criminal case in court).

In spite of the small proportion of the sample that was readmitted for competency restoration pre-adjudication, some interesting patterns emerged relating to the aggregated data that support prior research findings. For instance, there were similarities in rates of symptom presentation and competency deficits across both recorded admissions. This lends credence to the troubling notion that some individuals who successfully restore and discharge back to jails will often decompensate and be committed once again to competency treatment for interfering symptoms the reemerge prior to having their day in court (Smith, 2018; Warren et al., 2013; Finkle et al., 2009).

It is also worth noting that the rate of ultimate findings of incompetency is higher among the patients re-hospitalized pre-adjudication (35%) than it is for the overall sample (30%). This indicates that pre-adjudication readmission could lead to increased likelihood of ultimate findings of incompetency or non-restorability. This finding elaborates on previous findings that have demonstrated how prior psychiatric treatment history may be associated with negative outcomes in later psychiatric admissions (Barros et al., 2016;

Dey et al., 2016). Thus, one of the negative restoration outcomes explored in this study may increase the likelihood of another unfavorable outcome occurring. This suggests there may also be unique constellations of patient related factors that influence the durability of restoration over time.

Implications

The results of this study expand upon the current understanding of negative outcomes in competency restoration, including factors that lead to ultimate determinations of incompetence to stand trial and those that lead to protracted forensic hospitalizations. Several factors were identified to have associations with these negative restoration outcomes, which ultimately have adverse implications for the defendant as well as for the broader system that bears the responsibility of providing their care while they are in custody pending court proceedings, as discussed in the literature (Gowensmith, 2019). Forensic hospitals, where most competency restoration is conducted (Heilbrun et al., 2019), are faced with the unreasonable burden of having to repeatedly treat individuals they successfully restore due to post-discharge developments outside of their control. The average LOS for patients in this sample was 136.5 days, which is consistent with the average of 147 days cited in the literature (Pirelli & Zapf, 2020). When one considers the disturbing fact that many defendants may face multiple admissions for indeterminate periods of treatment that further delay resolution of their criminal proceedings, these numbers are staggering.

The noted competency deficits and symptoms present across admissions in this sample indicated that when individuals decompensate in jail, they are readmitted to inpatient facilities for competency restoration with similar presentations and deficiencies.

The repetitive, cyclical nature of restoration and decompensation is predictable and avoidable. As noted across the competency restoration literature, this phenomenon is also costly to state governments and other treatment providing agencies, including county jails that are often the de facto providers of psychiatric treatment for offenders.

In this study sample, 30% of patients were ultimately found IST. This is consistent with prior findings of 27.5% (Pirelli Gottdeiner, & Zapf, 2011) and 38.8% (Murrie, Gardner, & Torres, 2020). There are likely a variety of factors that influence the rates of ultimate competency findings (i.e., CST or IST), as noted in the latter of these studies. Variability in the quality and detail of forensic reports speaking to specific psycholegal abilities has been found to be a contributing factor to the wide range of competency opinion rates. Vague and unsubstantiated competency opinions in evaluation reports impeded the ability to conclusively answer some of the questions posed in this study, but more problematically they have policy level implications and costs to all parties involved.

Limitations

As noted, access to data was limited due the pandemic context. Additionally, there was substantial turnover in key administrative personnel at HHSC. Both of these issues led to a protracted coordination and approval process for this project; these issues also condensed the data collection timeline substantially.

Additionally, there were several issues with the data that was provided pertaining to the outpatient evaluation that led to the index hospitalization. In multiple cases, the requisite reports were not made available to the researcher. Further, among the reports that were made available, there was variability in the quality of pretrial CST reports.

Specifically, many of the reports did not explicitly address competency abilities in a comprehensive manner.

Pre-adjudication re-commitment for CR appears to be a low base-rate phenomenon. Nonetheless, the researcher noted multiple cases of patients in this study who were readmitted for competency restoration pertaining to the index offense(s) of this study (i.e., after the December 2020 data cut date for this project). It is further acknowledged that the patients in this study may have hospitalizations that were not reflected in the available collateral data. Thus, the results of this study speaking to this issue likely represent an underestimate of the true rate of re-hospitalization prior to adjudication of the index offense.

Future Directions

The study was conducted during an unprecedented pandemic crisis, which led to unforeseen and unavoidable limitations. Despite the ostensible simplicity of this retrospective design, there were many complications that resulted. The pandemic limited access to records and impeded the ability to coordinate with administrators and the custodians of patient records, which led to delays. For the treatment providers, pandemic countermeasures restricted or curtailed established competency programming, including key measures of treatment progress such as group therapy and competency education. Much can be learned from these unique circumstances to inform future directions in this area of research. A comparison of pre-pandemic and peri-pandemic statistics would provide informative insight into how the system was impacted. It may also elucidate ways to tailor or amend current practices to accommodate unique patient related factors that were previously unknown (i.e., prior to the pandemic).

State hospital systems, which serve as the main effort in providing competency restoration, are faced with a growing demand for forensic hospital beds or increasing rates of ultimate IST findings. Community-based competency restoration programs have been identified as a creative solution to this problem. As these programs continue to proliferate and expand services, it will be important to periodically evaluate how they can be leveraged to take the strain off inpatient facilities and accommodate demand. This is one among the many emerging areas of competency restoration literature that will provide important insights into ways to foster better outcomes for individuals in the future.

Future research exploring variables that influence negative restoration outcomes, particularly those that lead to readmission to competency restoration treatment pre-adjudication, will provide critical data for policy level decision makers and practitioners alike. It is recommended that future studies specifically examine samples of re-hospitalized patients to provide more comprehensive understanding of risks factors, treatment progress indicators, and possible intervention strategies. Special importance must be placed on obtaining evaluation reports for each admission and discharge to track variables across periods of treatment. Researchers may wish to account for the confounding influence of evaluator opinion related factors in their design, an issue that has previously been identified in recent studies.

Conclusion

The results of this study add to the collective understanding of variables that influence competency restoration outcomes. There remains a paucity of literature regarding re-hospitalization for competency treatment. These results support prior

findings while refining focus of future efforts to examine the cyclical nature of competency restoration and decompensation and to reduce its cost to the system and individuals alike. This study lends further support to efforts seeking to improve and expand existing competency programs, and it is hoped that it will inform development of sustainable solutions to a growing problem.

REFERENCES

- Advokat, C. D., Guidry, D., Burnett, D. M. R., Manguno-Mire, G., & Thompson, J. W. (2012). Competency restoration treatment: Differences between defendants declared competent or incompetent to stand trial. *Journal of the American Academy of Psychiatry and the Law*, 1, 89.
- Barros, R. E., Marques, J. M., Santos, J. L., Zuardi, A. W., & Del-Ben, C. M. (2016). Impact of length of stay for first psychiatric admissions on the ratio of readmissions in subsequent years in a large Brazilian catchment area. *Social Psychiatry and Psychiatric Epidemiology*, 51(4), 575–587.
<https://doi.org/10.1007/s00127-016-1175-x>
- Cooper, V. G., & Zapf, P. A. (2003). Predictor variables in competency to stand trial decisions. *Law & Human Behavior*, 27(4), 423–436.
- Cox, J., Kois, L. E., & Brodsky, S. L. (2019). Direct observation of defendant-attorney interactions in assessing abilities to assist. *Professional Psychology: Research and Practice*, 50(5), 307–314. <https://doi-org.ezproxy.shsu.edu/10.1037/pro0000228>
- Dey, S., Menkes, D.B., Obertova, Z., Chauduri, S., & Mellsop, G. (2016.) Correlates of re-hospitalization in schizophrenia. *Australasian Psychiatry*, 24(4), 356-359. doi: 10.1177/1039856216632395
- Dirks-Linhorst, A., Linhorst, D. M., & Loux, T. M. (2018). The role of race in court-ordered pretrial psychiatric evaluations. *Journal of Ethnicity in Criminal Justice*, 16(3), 225–248. <https://doi-org.ezproxy.shsu.edu/10.1080/15377938.2018.1517070>
- Dusky v. U.S., 362 U.S. 402 (1960).

- Drope v. Missouri, 420 U.S. 162 (1975).
- Finkle, M.J., Kurth, R., Cadle, C., & Mullan, J. (2009.) Competency courts: A creative solution for restoring competency to the competency process. *Behavioral Sciences and The Law*, 27, 767-786. doi: 10.1002/bsl.890
- Fitch, W. L., & Steinberg, S. R. (2003). Competency to stand trial and criminality responsibility. *Maryland Bar Journal*, 36(1), 14–19.
- Gay, J. G., Ragatz, L., & Vitacco, M. (2015). Mental health symptoms and their relationship to specific deficits in competency to proceed to trial evaluations. *Psychiatry, Psychology, and Law*, 5, 780.
- Gay, J. G., Vitacco, M. J., & Ragatz, L. (2017). Mental health symptoms predict competency to stand trial and competency restoration success. *Legal & Criminological Psychology*, 22(2), 288–301. <https://doi-org.ezproxy.shsu.edu/10.1111/lcrp.12100>
- Godinez v. Moran, 509 U.S. 389 (1993).
- Gowensmith, W. N., Frost, L. E., Speelman, D. W., & Therson, D. E. (2016). Lookin’ for beds in all the wrong places: Outpatient competency restoration as a promising approach to modern challenges. *Psychology, Public Policy, and Law*, 3, 293.
- Gowensmith, W. N. (2019). Resolution or resignation: The role of forensic mental health professionals amidst the competency services crisis. *Psychology, Public Policy, and Law*, 25(1), 1–14. <https://doi-org.ezproxy.shsu.edu/10.1037/law0000190>
- Grossi, L. M., Green, D., Schneider, M., Belfi, B., & Segal, S. (2018). Personality, psychiatric, and cognitive predictors of length of time for competency to stand trial restoration. *International Journal of Forensic Mental Health*, 17(2), 167.

- Harris, S. & Weiss, R. (2018). The impact of defendants' race in competency to stand trial referrals. *International Journal of Law and Psychiatry* 57, 85–90.
<https://doi.org/10.1016/j.ijlp.2018.01.003>
- Heilbrun, K., Giallella, C., Wright, H. J., DeMatteo, D., Griffin, P. A., Locklair, B., & Desai, A. (2019). Treatment for restoration of competence to stand trial: Critical analysis and policy recommendations. *Psychology, Public Policy, and Law*, 25(4), 266–283. <https://doi-org.ezproxy.shsu.edu/10.1037/law0000210>
- Hubbard, K. L., Zapf, P. A., & Ronan, K. A. (2003). Competency restoration: An examination of the differences between defendants predicted restorable and not restorable to competency. *Law & Human Behavior*, 27(2), 127–139.
- Jackson v. Indiana, 406 U.S. 715 (1972).
- Johnson, S. (2010). *Trials of the century: An encyclopedia of popular culture and the law*, Vol 1. Santa Barbara, CA: ABC-CLIO.
- Kois, L., Pearson, J., Chauhan, P., Goni, M., & Saraydarian, L. (2013). Competency to stand trial among female inpatients. *Law and Human Behavior*, 37(4), 231.
- Kois, L., Potts, H., Cappello, V., Cox, J., Zapf, P. (2020). *Updating the 'magic number:' Contemporary competence to proceed metrics reported by U.S. judiciaries*. [Conference presentation]. AP-LS 2020 Convention, New Orleans, LA, United States.
- Linhorst, D. M., Ann Dirks-Linhorst, P., McGraugh, S., Choate, L., & Riley, S. (2018). A comparison of defendants with mental illness represented by public defenders and private attorneys: an analysis of court-ordered pretrial psychiatric evaluations.

American Journal of Criminal Justice, 43(4), 810–830. <https://doi-org.ezproxy.shsu.edu/10.1007/s12103-017-9430-6>

McCallum, K. E., MacLean, N., & Gowensmith, W. N. (2015). The impact of defendant ethnicity on the psycholegal opinions of forensic mental health evaluators.

International Journal of Law and Psychiatry, 39, 6–12. <https://doi-org.ezproxy.shsu.edu/10.1016/j.ijlp.2015.01.015>

Melton, G. B., Petrila, J., Poythress, N. G., Slobogin, C., Otto, R. K., Mossman, D., & Condie, L. O. (2018). *Psychological evaluations for the courts: A handbook for mental health professionals and lawyers* (4th ed.). Guilford Press.

Mikolajewski, A. J., Manguno, M. G. M., Coffman, K. L., Deland, S. M., Thompson, J. W., Manguno-Mire, G. M., & Thompson, J. W., Jr. (2017). Patient characteristics and outcomes related to successful outpatient competency restoration. *Behavioral Sciences & the Law*, 35(3), 225–238. <https://doi-org.ezproxy.shsu.edu/10.1002/bsl.2287>

Miller, R. D. (2003). Hospitalization of criminal defendants for evaluation of competence to stand trial or for restoration of competence: clinical and legal issues. *Behavioral Sciences & the Law*, 21(3), 369.

Morris, D. R., & DeYoung, N. J. (2012). Psycholegal abilities and restoration of competence to stand trial. *Behavioral Sciences and the Law*, 6, 710.

Munetz, M.R., Grande, T.P., & Chambers, M.R. (2001.) The incarceration of individuals with severe mental disorders. *Community Mental Health Journal*, 37, 361-372.

- Murrie, D. C., Gardner, B. O., & Torres, A. N. (2020). Competency to stand trial evaluations: A state-wide review of court-ordered reports. *Behavioral Sciences & the Law*, 38(1), 32–50. <https://doi-org.ezproxy.shsu.edu/10.1002/bsl.2436>
- Murrie, D. C., Boccaccini, M. T., Zapf, P. A., Warren, J. I., & Henderson, C. E. (2008). Clinician variation in findings of competence to stand trial. *Psychology, Public Policy, and Law*, 3, 177.
- Nicholson, R.A., & McNulty, J.L. (1992). Outcome of hospitalization for defendants found incompetent to stand trial. *Behavioral Sciences and the Law*, 10, 371-383.
- Pirelli, G., & Zapf, P. A. (2020). An Attempted Meta-Analysis of the Competency Restoration Research: Important Findings for Future Directions. *Journal of Forensic Psychology Research and Practice*, 2, 134.
- Pirelli, G., Gottdiener, W. H., & Zapf, P. A. (2011). A Meta-Analytic Review of Competency to Stand Trial Research. *Psychology, Public Policy, and Law*, 1, 1.
- Pirelli, G., Zapf, P., & Gottdiener, W. (2011). Competency to stand trial research: Guidelines and future directions. *Journal of Forensic Psychiatry & Psychology*, 22(3), 340–370. <https://doi-org.ezproxy.shsu.edu/10.1080/14789949.2011.552622>
- Riggins v. Nevada, 504 US 127 (1992).
- Sell v. U.S., 539 US 166 (2003).
- Shannon, B. D. (2017). Competency, ethics, and morality. *Texas Tech Law Review*, 49(4), 861–880.
- Smith, M. W. (2018). Restore, revert, repeat: Examining the decompensation cycle and the due process limitations on the treatment of incompetent defendants. *Vanderbilt Law Review*, 71(1), 319–356.

- Texas Code of Criminal Procedure, Art. 46B, (2004).
- Varela, J. G., Boccaccini, M. T., Gonzalez, Jr., E., Gharagozloo, L., & Johnson, S. M. (2011). Do defense attorney referrals for competence to stand trial evaluations depend on whether the client speaks English or Spanish? *Law and Human Behavior, 35*, 501-511.
- Warren, J.I., Murrie, D.C., Stejskal, W., Colwell, L.H., Morris, J., Chauhan, P., Dietz, P. (2006.) Opinion formation in evaluating the adjudicative competence and restorability of criminal defendants: A review of 8,000 evaluations. *Behavioral Sciences and The Law, 24*, 113-132. doi: 10.1002/bsl.699
- Weiss, K. J. (2004). Criminal Competency on Trial, by Mark C. Bardwell and Bruce A. Arrigo. *Journal of Psychiatry and Law, 2*, 225.
- Youtsey v. United States, 97 F. 937 (6th Cir. 1899).
- Zambrano, D., Winterstein, A., Bussing, R., Yang, S., Pace, K., & Campbell, K. (2016.) Risk factors for hospital readmission of psychiatric patients: A systemic literature review. *Research in Social and Administrative Pharmacy, 12*, ed. 9.
- Zapf, P.A., & Roesch, R. (2008.) *Evaluation of Competency to Stand Trial*. Oxford University Press, Inc.: New York, NY.

Table 1*Demographics, Clinical, and Legal Variables*

	<i>n (percent)</i>
<i>Demographic Variables</i>	
Age at Admission	$M = 39.0 (SD = 12.63)$
Race	
Black/African American	104 (41.6%)
Latinx	48 (19.2%)
Caucasian/White	94 (37.6%)
Other	4 (1.6 %)
Sex	
Male	164 (65.6%)
Female	86 (34.4%)
Level of Education	
Did not graduate H.S.	95 (38%)
H.S. graduate	87 (34.8%)
Some college/ AA degree	56 (22.4%)
College graduate	12 (4.8%)
Relationship Status	
Not in a relationship	220 (88%)
In a relationship	30 (12%)
Source of Legitimate Income	
No income	143 (57.2%)
Source of income	107 (42.8%)
Housing at Arrest	
Homeless	117 (46.8%)
Had housing	133 (53.2%)
<i>Clinical Variables</i>	
History of Forensic Hospitalization	
No	165 (66%)
Yes (one)	42 (16.8%)
Multiple	43 (17.2%)
History of Psychiatric Hospitalization	
No	91 (36.4%)
Yes (one)	42 (16.8%)
Multiple	117 (46.8%)
Group Competency Tutoring	
No	43 (17.2%)
Partial	119 (47.6%)
Yes	83 (33.2%)
Patient Restrained	
No	179 (71.6%)
Yes	71 (28.4%)
Medication Compliant at Admission	
No	100 (40%)
Yes	143 (57.2%)
Not noted/unknown	7 (2.8%)
<i>Legal Variables</i>	
Index Offense	
Violent crime	128 (51.2%)
Non-violent crime	122 (48.8%)

Table 2*Results of Independent Samples T-test Comparing Age at Admission and Competency**Restoration Outcomes*

Scale	Mean Age & SD		<i>t</i>	<i>p</i>	<i>d</i>	95% C.I.	
	Yes	No				Lower	Upper
Restored to Competency	38.00 (12.65)	39.19 (12.26)	-.67*	.50	-	-4.68	2.31
Extended Hospitalization	39.46 (13.37)	38.33 (11.48)	-.69**	.49	-	-4.35	2.07
Re-hospitalized Pre-adjudication	38.50 (11.46)	39.05 (12.75)	.20***	.84	.04	-5.03	6.12

Note. * *df* = 155, ** *df* = 248, *** *df* = 24.

Table 3

Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Competency Opinion at Discharge

Variable	CST	IST	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Sex			1.39	.24	1.44 ^a	.78	2.65
Female	51 (35.9)	21 (29.2)					
Male	91 (64.1)	54 (72)					
Education			8.04	.04	.19 ^b	-	-
Did not graduate	42 (29.6)	33 (44)					
High school	50 (35.2)	26 (34.7)					
Some college	43 (30.3)	11 (14.7)					
College graduate	7 (4.9)	5 (6.7)					
Race			.44	.93	.04 ^b	-	-
Black	61 (43)	30 (40)					
Latinx	25 (17.6)	15 (20)					
White	53 (37.3)	29 (38.7)					
Other	3 (2.1)	1 (1.3)					
Significant			3.51	.06	.39 ^a	.14	1.08
No	120 (84.5)	70 (93.3)					
Yes	22 (15.5)	5 (6.7)					
Source of Income			1.05	.30	1.34 ^a	.76	2.36
No	86 (60.6)	40 (53.3)					
Yes	56 (39.4)	35 (46.7)					
Homeless			1.17	.28	.73 ^a	.42	1.29
No	61 (43)	38 (50.7)					
Yes	81 (57)	37 (49.3)					
Prior Comp.			.57	.75	.05 ^b	-	-
No	96 (67.6)	49 (65.3)					
Yes	25 (17.6)	12 (16)					
Multiple	21 (14.8)	14 (18.7)					
Prior Psychiatric				.25	.11 ^b	-	-
No	56 (39.4)	24 (32)					
Yes	27 (19)	11 (14.7)					

(continued)

Variable	CST	IST	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Multiple	59 (41.5)	40 (53.3)					
Medication			3.54	.06	.57 ^a	.33	1.03
No	49 (36)	37 (49.3)					
Yes	87 (64)	38 (50.7)					
Indiv. Competency			9.31	.01	.37 ^b	-	-
No	13 (28.9)	14 (56)					
Partial	6 (13.3)	6 (24)					
Yes	26 (57.8)	5 (20)					
Group Competency			12.20	.002	.24 ^b	-	-
No	17 (12.2)	18 (24)					
Partial	61 (43.9)	41 (54.7)					
Yes	61 (43.9)	16 (21.3)					
Patient Restrained			3.10	.07	1.72 ^a	.94	3.15
No	107 (75.4)	48 (64)					
Yes	35 (24.6)	27 (36)					
Index Crime			8.34	.004	2.30 ^a	1.30	4.08
Violent Crime	86 (60.6)	30 (40)					
Nonviolent Crime	56 (39.4)	45 (60)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 4

Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Extension to Hospitalization

Variable	Extended	Not Ext.	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Sex			.04	.84	.95 ^a	.56	1.61
Female	34 (33.7)	52 (34.9)					
Male	67 (66.3)	97 (65.1)					
Education			13.03	.005	.23 ^b	-	-
Did not graduate	32 (31.7)	63 (42.3)					
High school graduate	32 (31.7)	55 (36.9)					
Some college	34 (33.7)	22 (14.8)					
College graduate	3 (3)	9 (6)					
Race			2.75	.43	.11 ^b	-	-
Black	36 (35.6)	68 (45.6)					
Latinx	20 (19.8)	28 (18.8)					
White	43 (42.6)	51 (34.2)					
Other	2 (2)	2 (1.3)					
Significant Relationship			.56	.45	.75 ^a	.35	1.61
No	87 (86.1)	133 (89.3)					
Yes	14 (13.9)	16 (10.7)					
Source of Income			.52	.47	.83 ^a	.50	1.38
No	55 (54.5)	88 (59.1)					
Yes	46 (45.5)	61 (40.9)					
Homeless			.03	.85	1.05 ^a	.63	1.74
No	48 (47.5)	69 (46.3)					
Yes	53 (52.5)	80 (53.7)					
Prior Comp. Restoration			.41	.81	.04 ^b	-	-
No	69 (68.3)	96 (64.4)					
Yes	16 (15.8)	26 (17.4)					
Multiple	16 (15.8)	27 (18.1)					
Prior Psychiatric Hosp			.26	.87	.03 ^b	-	-
No	35 (34.7)	56 (37.6)					
Yes	18 (17.8)	24 (16.1)					

(continued)

Variable	Extended	Not Ext.	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Multiple	48 (47.5)	69 (46.3)					
Medication Compliance			2.16	.14	.67 ^a	.39	1.14
No	34 (35.4)	66 (44.9)					
Yes	62 (64.6)	81 (55.1)					
Indiv. Competency			.97	.62	.11 ^b	-	-
No	10 (38.5)	22 (43.1)					
Partial	3 (11.5)	9 (17.6)					
Yes	13 (50)	20 (39.2)					
Group Competency			14.14	.001	.24 ^b	-	-
No	12 (12.1)	31 (21.2)					
Partial	40 (40.4)	79 (54.1)					
Yes	47 (47.5)	36 (24.7)					
Patient Restrained			.23	.63	1.15 ^a	.65	2.02
No	74 (73.3)	105 (70.5)					
Yes	27 (26.7)	44 (29.5)					
Index Crime Category			.19	.66	.89 ^a	.54	1.48
Violent Crime	50 (49.5)	78 (52.3)					
Nonviolent Crime	51 (50.5)	71 (47.7)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 5

Results of Chi-Square Tests Comparing Demographic, Clinical, and Legal Variables and Re-hospitalization Pre-adjudication

Variable	Re-hosp.	No Re-hosp.	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Sex			1.99	.15	2.22 ^a	.72	6.85
Female	82 (35.7)	4 (20)					
Male	148 (64.3)	16 (80)					
Education			7.44	.06	.17 ^b	-	-
Did not graduate	87 (37.80)	8 (40)					
High school graduate	76 (33)	11 (55)					
Some college	56 (24.3)	0 (0)					
College graduate	11 (4.8)	1 (5)					
Race			2.64	.45	.10 ^b	-	-
Black	95 (41.3)	9 (45)					
Latinx	42 (18.3)	6 (30)					
White	89 (38.7)	5 (25)					
Other	4 (1.7)	0 (0)					
Significant			1.01	.32	.37 ^a	.05	2.83
No	201 (87.4)	19 (95)					
Yes	29 (12.6)	1 (5)					
Source of Income			.04	.84	1.10 ^a	.44	2.76
No	132 (57.4)	11 (55)					
Yes	98 (42.6)	9 (45)					
Homeless			.09	.77	.87 ^a	.35	2.17
No	107 (46.5)	10 (50)					
Yes	123 (53.5)	19 (50)					
Prior Comp.			13.07	.001	.23 ^b	-	-
No	158 (68.7)	7 (35)					
Yes	38 (16.5)	4 (20)					
Multiple	34 (14.8)	9 (45)					
Prior Psychiatric Hosp			.92	.63	.06 ^b	-	-
No	84 (36.5)	7 (35)					
Yes	40 (17.4)	2 (10)					

(continued)

Variable	Re-hosp.	No Re-hosp.	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Multiple Medication	106 (46.1)	11 (55)	1.73	.15	.54 ^a	.22	1.37
No	89 (39.9)	11 (55)					
Yes	134 (60.1)	9 (45)					
Indiv. Competency			2.03	.36	.16 ^b	-	-
No	28 (39.4)	4 (66.7)					
Partial	11 (15.5)	1 (16.7)					
Yes	32 (45.1)	1 (16.7)					
Group Competency			.64	.72	.05 ^b	-	-
No	39 (17.3)	4 (20)					
Partial	111 (49.3)	8 (40)					
Yes	75 (33.3)	8 (40)					
Patient Restrained			4.98	.02	2.77 ^a	1.10	6.98
No	169 (73.5)	10 (50)					
Yes	61 (26.5)	10 (50)					
Index Crime Category			.01	.91	1.05 ^a	.42	2.63
Violent Crime	118 (51.3)	10 (50)					
Nonviolent Crime	112 (48.7)	10 (50)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 6

Binomial Regressions: Demographic, Clinical, and Legal Predictor Variables and Restoration Outcome Variables

Variable	<i>b</i>	S.E.	Wald	<i>p</i>	OR	95% CI
Dependent Variable: Not Restored at Discharge (n = 214)						
Level of Education ¹						
High School Graduate	-.30	.36	.71	.40	1.35	.67 – 2.74
Some College	-1.09	.43	6.30	.01	2.97	1.27 – 6.94
College Graduate	-.64	.68	.89	.35	1.89	.50 – 7.10
Group Competency Participation ²						
Partial Attendance	-.67	.42	2.54	.11	1.95	.86 – 4.45
Full Attendance	-1.63	.47	11.82	.001	5.08	2.01 – 12.84
Violent Criminal Charge (index) ³	1.01	.32	9.99	.002	.37	.20 – .68
Dependent Variable: Extension to Hospitalization (n = 245)						
Level of Education ¹						
High School Graduate	.05	.33	.02	.88	.95	.50 – 1.80
Some College	-.91	.36	6.34	.01	2.49	1.22 – 5.07
College Graduate	.35	.72	.24	.62	.70	.17 – 2.86
Group Competency Participation ²						
Partial Attendance	-.25	.40	.39	.53	1.28	.59 – 2.80
Full Attendance	-1.17	.42	7.90	.005	3.23	1.43 – 7.30
Dependent Variable: Re-hospitalization Pre-adjudication (n = 230)						
Prev. Comp Rest. Admissions ⁴	1.50	.49	9.30	.002	4.50	1.71 - 11.84
Patient Restrained ⁵	.96	.48	3.90	.04	2.60	1.01 - 6.73

Note. 1 ref. group = “did not graduate high school”, 2 ref. group = “did not attend competency education groups,” 3 ref. group = “violent charge,” 4 ref. group = “no prior competency restoration admissions,” 5 ref. group = “patient not restrained.”

Table 7

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Factual Knowledge

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			2.67	.10	1.88 ^a	.88	4.03
No	156	20 (60.6)					
Yes	54 (25.7)	13 (39.4)					
Poor Medication			1.14	.29	.67 ^a	.31	1.41
No	82 (40)	16 (50)					
Yes	123 (60)	16 (50)					
Group Comp Rest			2.65	.27	.11 ^b		
No	33 (15.9)	9 (27.3)					
Partial	102	15 (45.5)					
Fully	72 (34.8)	9 (27.3)					
Ind. Comp Rest			1.12	.57	.12 ^b		
No	24 (38.7)	7 (53.8)					
Partial	10 (16.1)	2 (15.4)					
Fully	28 (45.2)	4 (30.8)					

Note: a = Odds Ratio, b = Cramer's *V*

Table 8

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Rational Understanding

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			1.57	.21	.72 ^a	.66	.78
No	170	4 (100)					
Yes	67 (28.3)	0 (0)					
Poor Medication			.44	.51	2.12 ^a	.22	20.67
No	96 (41.4)	1 (25)					
Yes	136	3 (75)					
Group Comp Rest			3.34	.19	.12 ^b		
No	42 (17.9)	0 (0)					
Partial	116	1 (25)					
Fully	76 (32.5)	3 (75)					
Ind. Comp Rest			4.24	.12	.24 ^b		
No	31 (44.3)	0 (0)					
Partial	11 (15.7)	0 (0)					
Fully	28 (40)	3 (100)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 9

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Ability to Consult with Attorney

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			.02	.893	.86 ^a	.09	8.37
No	172 (72)	3 (75)					
Yes	67 (28)	1 (25)					
Poor Medication			.13	.72	.696 ^a	.10	5.02
No	96 (41)	2 (50)					
Yes	138 (59)	2 (50)					
Group Comp Rest			3.37	.19	.12 ^b		
No	42 (17.9)	0 (0)					
Partial	117	1 (25)					
Fully	76 (32.3)	3 (75)					
Ind. Comp Rest			2.33	.31	.18 ^b		
No	31 (43.7)	0 (0)					
Partial	11 (15.5)	1 (33.3)					
Fully	29 (40.8)	2 (66.6)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 10

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Rational Understanding)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			.96	.33	1.46 ^a	.68	3.13
No	152	24 (66.7)					
Yes	52 (25.5)	12 (33.3)					
Poor Medication			.37	.54	.80 ^a	.39	1.65
No	80 (40.2)	16 (45.7)					
Yes	119	19 (54.3)					
Group Comp Rest			1.76	.42	.09 ^b		
No	32 (15.9)	9 (25)					
Partial	100	16 (44.4)					
Fully	69 (34.3)	11 (30.6)					
Ind. Comp Rest			1.48	.48	.14 ^b		
No	23 (37.7)	7 (53.8)					
Partial	11 (18)	1 (7.7)					
Fully	27 (44.3)	5 (38.5)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 11

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Ability to Discuss Facts)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			.20	.65	1.33 ^a	.39	4.56
No	167	8 (66.7)					
Yes	63 (27.4)	4 (33.3)					
Poor Medication			.003	.96	.97 ^a	.30	3.15
No	92 (40.9)	5 (41.7)					
Yes	133	7 (58.3)					
Group Comp Rest			.70	.71	.05 ^b		
No	38 (16.8)	3 (25)					
Partial	112	6 (50)					
Fully	76 (33.6)	3 (25)					
Ind. Comp Rest			.82	.66	.11 ^b		
No	28 (40)	2 (50)					
Partial	12 (17.1)	0 (0)					
Fully	30 (42.9)	2 (50)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 12

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Legal Strategy Ability)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			2.36	.13	.72 ^a	.66	.78
No	169	6 (100)					
Yes	67 (28.4)	0 (0)					
Poor Medication			.15	.70	1.40 ^a	.25	7.78
No	95 (41.1)	2 (33.3)					
Yes	136	4 (66.7)					
Group Comp Rest			3.57	.17	.12 ^b		
No	42 (18.1)	0 (0)					
Partial	116 (50)	2 (33.3)					
Fully	74 (31.9)	4 (66.7)					
Ind. Comp Rest			2.33	.31	.18 ^b		
No	31 (43.7)	0 (0)					
Partial	11 (15.5)	1 (33.3)					
Fully	29 (40.8)	2 (66.7)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 13

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Understand Adversarial Nature of Courtroom)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			2.54	.11	1.79 ^a	.87	3.67
No	140	25 (62.5)					
Yes	47 (25.1)	15 (37.5)					
Poor Medication			.007	.93	1.03 ^a	.51	2.11
No	74 (40.2)	15 (39.5)					
Yes	110	23 (60.5)					
Group Comp Rest			4.65	.10	.14 ^b		
No	27 (14.7)	11 (27.5)					
Partial	96 (52.2)	15 (37.5)					
Fully	61 (33.2)	14 (35)					
Ind. Comp Rest			.65	.72	.10 ^b		
No	18 (35.3)	7 (46.7)					
Partial	9 (17.6)	2 (13.3)					
Fully	24 (47.1)	6 (40)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 14

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Conform Behavior in Courtroom)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			.01	.94	.96 ^a	.36	2.57
No	151	59 (28.1)					
Yes	16 (72.7)	6 (27.3)					
Poor Medication			3.99	.04	3.017 ^a	.98	9.34
No	89 (43)	4 (20)					
Yes	118 (57)	16 (80)					
Group Comp Rest			2.24	.33	.10 ^b		
No	38 (18.4)	2 (9.1)					
Partial	103 (50)	10 (45.5)					
Fully	65 (31.6)	10 (45.5)					
Ind. Comp Rest			.17	.92	.05 ^b		
No	26 (41.9)	2 (33.3)					
Partial	9 (14.5)	1 (16.7)					
Fully	27 (43.5)	3 (50)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 15

Results of Chi-Square Tests Comparing Pretrial Evaluation Opine and Factors that Influence Restoration Outcome: Texas Statute (Testify)

Variable	Not Present	Present	χ^2	<i>p</i>	Effect Size	95% C.I.	
	<i>n</i> (%)	<i>n</i> (%)				Lower	Upper
Physical Restraint			.32	.57	.64 ^a	.13	3.07
No	160	8 (80)					
Yes	63 (28.3)	2 (20)					
Poor Medication			.50	.48	1.64 ^a	.41	6.52
No	90 (41.3)	3 (30)					
Yes	128	7 (70)					
Group Comp Rest			.58	.75	.05 ^b		
No	39 (17.8)	1 (10)					
Partial	108	6 (60)					
Fully	72 (32.9)	3 (30)					
Ind. Comp Rest			.36	.84	.07 ^b		
No	27 (40.9)	28 (41.2)					
Partial	10 (15.2)	10 (14.7)					
Fully	29 (43.9)	30 (44.1)					

Note. a = Odds Ratio, b = Cramer's *V*

Table 16

Patients with Impairments Present at Initial Admission, Initial Discharge, and Readmission before Adjudication (n = 12)

Variable	Initial Admission	Readmission	Discharge
Competency Prongs			
Factual Knowledge	10 (83.3%)	10 (83.3%)	0
Rational Understanding	12 (100%)	12 (100%)	4 (33.3%)
Consult with Attorney	12 (100%)	12 (100%)	4 (33.3%)
Texas Statute Prongs			
Factual Understanding	10 (83.3%)	10 (83.3%)	4 (33.3%)
Discuss Facts	12 (100%)	12 (100%)	4 (33.3%)
Legal Strategies	12 (100%)	12 (100%)	5 (51.7%)
Adversarial Nature Court	9 (75%)	7 (58.3%)	4 (33.3%)
Behavior in Court	12 (100%)	10 (83.3%)	5 (51.7%)
Ability to Testify	12 (100%)	12 (100%)	5 (51.7%)
Symptoms Noted in Evaluation			
Hallucinations	6 (50%)	6 (50%)	2 (16.7%)
Delusions	10 (83.3%)	8 (66.7%)	2 (16.7%)
Mania	3 (25%)	3 (25%)	0
Depression	0	0	0
Suicidal Ideation	0	0	0
Cognitive Deficits	2 (16.7%)	1 (8.3%)	2 (16.7%)
Disorganized Thoughts	10 (83.3%)	11 (91.7%)	2 (16.7%)
Other symptoms	4 (33.3%)	4 (33.3%)	1 (8.3%)

Note. 20 patients were re-hospitalized pre-adjudication. Of these 20, there were complete data for 12 (i.e., evaluation reports present for initial admission, readmission, and discharge).

APPENDIX A

CST Data Coding Sheet

Record #: _____

Demographic Variables			
Date of Birth (D1.)		Sex (D2.)	0 = female 1 = male
Education (D3.)	0 = did not graduate H.S. 1 = H.S. diploma 2 = some college/AA 3 = BA/BS degree 4 = graduate degree	Race (D4.)	0 = Asian 5 = Other: (specify) 1 = Black 2 = Latinx 3 = White 4 = Biracial
Family/Relationship Status. (D5.)	0 = single 1 = unmarried/cohabitating 2 = married 3 = divorced 4 = widowed	Citizenship (D6.)	0 = U.S. born citizen 1 = naturalized citizen 2 = permanent resident 3 = undocumented 4 = Other (specify)
Language (D7.)	0 = English (native speaker)	1 = English (non-native)	2 = Spanish 3 = Other (specify)
Employment (D8.) (at arrest)	0 = unemployed 1 = part time 2 = full time 3 = retired 4 = SSI/disability 5 = unk/not noted	Employment (D8.a.) (anticipated at discharge?)	0 = unemployed 1 = part time 2 = full time 3 = retired 4 = SSI/disability 5 = unk/not noted
Housing (D9.) (at arrest)	0 = homeless 1 = supervised housing 2 = with family 3 = with family (as dependent) 4 = individual/single housing 5 = other (specify) 6 = unk/ not noted	Housing (D9.a.) (anticipated at discharge?)	0 = homeless 1 = supervised housing 2 = with family 3 = with family (as dependent) 4 = individual/single housing 5 = other (specify) 6 = unk/not noted

Legal Variables				
	Dates:	Charge(s)	Disposition after arrest	Medication at arrest?
Initial Arrest (L10.) (for index offense)			0 = Jail 1 = Community 2 = Not Noted	0 = No 1 = Yes 2 = Not noted
Subsequent Arrest(s)? (L11.)			0 = Jail 1 = Community 2 = Not Noted	0 = No 1 = Yes 2 = Not noted
(new charges prior to adjudication of index offense)			0 = Jail 1 = Community 2 = Not Noted	0 = No 1 = Yes 2 = Not noted
			0 = Jail 1 = Community 2 = Not Noted	0 = No 1 = Yes 2 = Not noted

CST Data Coding Sheet

Record #: _____

Clinical Variables				
Most Recent Hospitalization (C12.) <i>(i.e., for competency restoration)</i>		Admission Date (C12.a.)	Discharge Date (C12.b.)	
Extensions to most recent hospitalization (C12.c.) <i>(include dates, ordered durations)</i>				
Previous Hospitalizations (pre-adjudication for competency restoration) (C13.a.)				
	Location	Admission Date	Discharge Date (or LOS)	
1.				
2.				
3.				
Other Previous Hospitalizations (prior to index offense) (C13.b.) <i>(Note: C- competency restoration, P- general psychiatric treatment, O- for other and specify)</i>				
	Location	Type (C/P/O)	Admission Date	Discharge Date (or LOS)
1.				
2.				
3.				
Current MH diagnoses <i>(i.e. most recent hospitalization pre-discharge)</i> (C14.)				
No	Yes			
0	1	No diagnosis		
0	1	Neurodevelopmental disorder (including ID, ASD, and BIF)		
0	1	Schizophrenia spectrum or other psychotic disorders (includes schizoaffective)		
0	1	Bipolar mood disorder		
0	1	Unipolar mood disorder		
0	1	Anxiety disorder (including obsessive-compulsive and related disorders)		
0	1	Trauma- and stressor-related disorder		
0	1	Substance-related disorder		
0	1	Neurocognitive disorder (including impairment due to TBI or medical condition)		
0	1	Personality disorder		
0	1	Other (Specify):		
Chronic Medical Conditions? (C14.a)				
Previous MH diagnoses (C15.)				
No	Yes			
0	1	No diagnosis		
0	1	Neurodevelopmental disorder (including ID, ASD, and BIF)		
0	1	Schizophrenia spectrum or other psychotic disorders (includes schizoaffective)		
0	1	Bipolar mood disorder		
0	1	Unipolar mood disorder		
0	1	Anxiety disorder (including obsessive-compulsive and related disorders)		
0	1	Trauma- and stressor-related disorder		
0	1	Substance-related disorder		
0	1	Neurocognitive disorder (including impairment due to TBI or medical condition)		
0	1	Personality disorder		
0	1	Other (Specify):		
<i>(Additional hospitalizations from C13.a. and C13.b.)</i>				

CST Data Coding Sheet

Record #: _____

Current Medication(s) (<i>i.e. pre-discharge</i>) (C16.)			
Court ordered? (C16.a.)		0 = no 1 = yes	
Injectable medication? (C16.b.)		0 = no 1 = yes	
Current compliance with medication? (C16.c.)		0 = n/a 1 = n 2 = partial 3 = y	
Medication in jail or community before admission? (C16.d.)		0 = no 1 = yes 2 = unk/not noted	
Individual Therapy (C17.)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Group Therapy (C18.)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Competency Restoration (Individual) (C19.)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Competency Restoration (Group) (C20.)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Substance Abuse Treatment (C21.)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Other Classes or Therapy (C22.) (Specify types, e.g. Ed rehab, music therapy, art therapy)		0 = n/a 1 = n (refused) 2 = partial/ attended some 3 = y (attended all/ completed program)	
Behavioral incidents (C23.)			
No	Yes		# of incidents (<i>for most recent hospitalization</i>)
0	1	Restrained (C23.a.)	
0	1	Held (C23.b.)	
0	1	Other (C23.c.) (Specify)	

CST Data Coding Sheet

Record #: _____

Evaluator Opinion/Assessment of Defendant: (For each: 0 = N, 1 = Y, 2 = Unknown/ Not noted by evaluator)

(* If competency instrument used, write in margin)		Initial	Mid-Tx	Mid-Tx	Discharge
R24.a.	Date of Evaluation				
R24.b.	Date of Report				
R25.	Evaluator Initials (include 3 initials and degree)				
R26.	Defendant capacity during criminal proceedings:				
R26.a.	Rationally understand the charges against them and the potential consequences of the pending criminal proceedings				
R26.b.	Disclose to counsel pertinent facts, events, and states of mind				
R26.c.	Engage in a reasoned choice of legal strategies and options				
R26.d.	Understand the adversarial nature of criminal proceedings				
R26.e.	Exhibit appropriate courtroom behavior				
R26.f.	Testify				
R27.	Defendant has a mental disease or defect (supported by personal history):				
R27.a.	Evidence of a mental illness				
R27.b.	Evidence of an intellectual disability				
R28.	<i>Identified condition has/is expected to last for at least one year</i>				
R29.	<i>The degree of impairment resulting from condition (incl. the specific impact on the defendant's capacities to engage with counsel in a reasonable and rational manner)</i>				
R.30.	<i>Is defendant taking psychoactive or other medication?</i>				
R30.a.	Is medication necessary to maintain the defendant's competency				
R30.b.	the effect of medication on the defendant's appearance demeanor, ability to participate in the proceedings.				
R31.	Demonstrated Factual Knowledge?				
R32.	Demonstrated Rational Understanding?				
R33.	Ability to Consult with Attorney?				
R34.	Evaluator comment on continued competency?				
R35.	Symptoms present*				
R35.a.	If other (specify):				
1 – Hallucinations 2 – Delusions	3 – Mania 4 – Depressed mood	5 – Suicidal Ideation 6 – Cog. Deficit	7 – Disorg. thoughts 8 – Other		

APPENDIX B



Institutional Review Board #2
FWA #00028877

November 6, 2020

RE: Protocol 677-14-2004: Factors Associated with Negative Outcomes in Competency Restoration.

Dear Mr. Francis:

Thank you for your consultation with Institutional Review Board (IRB2). After reviewing your IRB application, IRB2 has determined that the proposed study activities meet the criteria for study **exemption** based on **45 CFR 46.101(d)(4)**.

Responsibilities of the Principal Investigator:

Research that is determined to be exempt from IRB review is *not exempt* from ensuring protection of human subjects. The following criteria to protect human subjects must be met.

1. Assures study participants will be selected equitably, so that the research risks and benefits are justly distributed.
2. Assures that the IRB will be immediately informed of any information and/or unanticipated problems that may increase risk to study participants and/or cause the category of IRB review to be reclassified to expedited or full board review.
3. Assures that the confidentiality and privacy of the subjects and the research data will be maintained appropriately to ensure minimal risks to study participants.
4. Will report, by amendment, any changes in the research study that alter the level of risk to study participants. Investigators are encouraged to contact IRB2 to discuss proposed changes before submitting an amendment.
5. Will report study closure to IRB2 upon completion of all study-related activities.

You are free to proceed with your research.

If you have any questions, please contact the IRB2 Administrator at: 512-206-5278 or irb2@hhsc.state.tx.us.

Thank you.

Laura LaChance for Brad Fitzwater (Chair)

November 6, 2020

IRB2 Chair or Designee

Date



Date: Nov 9, 2020 10:13:58 AM CST

TO: Joshua Francis Jorge Varela
 FROM: SHSU IRB
 PROJECT TITLE: Factors Associated with Negative Outcomes in Competency Restoration
 PROTOCOL #: IRB-2020-245
 SUBMISSION TYPE: Initial
 ACTION: Approved
 DECISION DATE: November 9, 2020
 ADMINISTRATIVE CHECK-IN DATE: November 9, 2021
 EXPEDITED REVIEW CATEGORY: 5. Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

Restart 2020 (COVID-19 update): The IRB has released specific guidelines for easing or transitioning existing IRB-approved studies or any new study subject to IRB oversight to in-person data collection. Please be advised, before ANY in-person data collection can begin, you must have IRB approval specifically for the conduct of this type of research. Please see the IRB response page for COVID-19 [here](#).

ATTENTION RESEARCHERS! Effective Monday, July 27, 2020, the IRB has revised its online office hours to 12-2 on Zoom Monday through Thursday. These will be permanent office hours. To access Zoom during the IRB's office hours, click [here](#). Just in case, here is the meeting ID: 712-632-8951. **SEE YOU ON ZOOM FROM 12-2 MONDAY-THURSDAY!**

Greetings,

The above-referenced submission has been reviewed by the IRB and it has been Approved. This study received expedited review, and the IRB determined that a renewal submission is needed, but only in the form of an administrative check-in submission. You will receive an email notification on the anniversary of this study approval, which will be on November 9, 2021. This study approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

The IRB reviewer provided the following information for the research team to consider: **For what it's worth, the incompetency test is disjunctive: A person is incompetent to stand trial if the person does not have: (1) sufficient present ability to consult with the person's lawyer with a reasonable degree of rational understanding; or (2) a rational as well as factual understanding of the proceedings against the person. Art. 46B.003(a), Code of Criminal Procedure (eff. Jan. 1, 2004)..**

Since Cayuse IRB does not currently possess the ability to provide a "stamp of approval" on any recruitment or consent documentation, it is the strong recommendation of this office to please include the following approval language in the footer of those recruitment and consent documents: IRB-2020-245/November 9, 2020/November 9,

2021.

Modifications: Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please submit a Modification Submission through [Cayuse IRB](#) for this procedure.

Incidents: All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please submit an Incident Submission through [Cayuse IRB](#) for this procedure. All Department of Health and Human Services and sponsor reporting requirements should also be followed.

Study Administrative Check-In: Based on the risks, this project does require a renewal in the form of an Administrative Check-In procedure. This means you are required to administratively check in with the IRB on an annual basis. November 9, 2021 is the anniversary of the review of your protocol. **To get started with your next Administrative Check-In procedure, you will submit a Renewal Submission through [Cayuse IRB](#). A reminder email will be sent to you on the anniversary of your most recent approval of *Factors Associated with Negative Outcomes in Competency Restoration*.**

Please note that all research records should be retained for a minimum of three years after the completion of the project. If you have any questions, please contact the Sharla Miles at 936-294-4875 or irb@shsu.edu. Please include your protocol number in all correspondence with this committee.

Sincerely,

Chase Young, Ph.D.
Chair, IRB
Hannah R. Gerber, Ph.D.
Co-Chair, IRB

VITA
CURRICULUM VITAE
Joshua M. Francis, M.A.

EDUCATION

<p>Predoctoral Clinical Internship Psychology Internship Program (APA Accredited) Center for Behavioral Medicine Kansas City, Missouri</p>	In progress
<p>Doctor of Philosophy in Clinical Psychology Sam Houston State University Huntsville, Texas <i>Dissertation: Factors Associated with Negative Outcomes in Competency Restoration (2022)</i> <i>Thesis: Sensation Seeking as a Criminogenic Risk Factor for Justice-Involved Veterans (2019)</i></p>	In Progress
<p>Master of Arts in Forensic Psychology University of Denver Denver, Colorado</p>	2017
<p>Graduate Certificate in Advanced International Affairs Texas A&M University College Station, Texas <i>Area of Concentration: Counterterrorism</i></p>	2014
<p>Associate of Arts in Arabic Studies Defense Language Institute Foreign Language Institute Monterey, California <i>Area of Concentration: Modern Standard Arabic</i></p>	2013
<p>Bachelor of Arts in Social Sciences University of Southern California Los Angeles, California <i>Area of Concentration: Psychology</i></p>	2002

CLINICAL EXPERIENCE

Graduate Practicum Student

Jun 2020 – Jul 2021

Austin State Hospital

Austin, Texas

Population/Setting: Adult Inpatient Psychiatric

- Implement a variety of empirically supported treatments in individual therapy and provide competency tutoring.
- Administer psychological testing and assessment of malingering to assist in treatment planning and co-author forensic and psychodiagnostic evaluation reports.
- Conduct inpatient competence to stand trial evaluations and violence risk assessments.

Supervisors: Dr. Jessica Valencia-Fagot; Dr. Lyndsay Brooks

Graduate Practicum Student

Aug 2019 – Jun 2020

The Institute for Rehabilitation and Research (TIRR)

Houston, Texas

Population/Setting: Inpatient Rehabilitation and Neuropsychology

- Administered neuropsychological assessments of patients as part of integrated rehabilitative care team.
- Conducted intake interviews and brief individual therapeutic interventions.
- Participated in didactics and team staff meetings as member of multidisciplinary team in treatment.

Supervisors: Dr. Danielle Blinstrubas, ABPP; Dr. Juliette Galindo

Assistant Forensic Evaluator

Sep 2018 – Jul 2021

Psychological Services Center, Sam Houston State University

Huntsville, Texas

Population/Setting: Outpatient Community Mental Health Clinic

- Conducted court-ordered, pre-trial evaluations with adults (e.g., competency to stand trial, mental state at the time of the offense) and authored forensic evaluation reports.
- Administered court-ordered evaluations of juvenile offenders to identify treatment and placement needs.
- Conducted immigration evaluations (i.e. extreme hardship and U-visa).

Supervisors: Dr. Mary Alice Conroy, ABPP; Dr. Wendy Elliott, ABPP; Dr. Darryl Johnson

Graduate Student Clinician

Sep 2018 – Jul 2021

Psychological Services Center, Sam Houston State University

Huntsville, Texas

Population/Setting: Outpatient Community Mental Health Clinic

- Conducted individual therapy with child and adult clients, employing empirically supported treatments including cognitive behavioral therapy, motivational interviewing, and dialectical behavior therapy.

- Conducted psychodiagnostic assessments, intake interviews, and treatment plans with clients.

Supervisors: Dr. Craig Henderson, Dr. Temilola Salami, Dr. Jaime Anderson, Dr. Jorge Varela

Mental Health Intern

Jun 2016 – June 2017

Correctional Psychology Associates

Centennial, Colorado

Population/Setting: Correctional/ Jail

- Conducted mental health assessments of inmates in Arapahoe County Detention Facility.
- Led a weekly symptom management therapy group for inmates in the mental health unit.
- Provided psychoeducation related to effective coping skills. Screened inmates for referral to staff psychiatrist for medication evaluations.

Supervisor: Dr. Elizabeth Sather

Graduate Student Clinician

Nov 2015 – Jun 2017

Denver FIRST Outpatient Competency Restoration Program

Denver, Colorado

Population/Setting: Outpatient Competency Restoration

- Provided court-ordered outpatient competency restoration services to improve client's ability to consult with their lawyer, testify relevantly, and communicate effectively in a courtroom setting.
- Consulted with defense attorneys and delivered psychoeducation to improve client factual legal knowledge and rational understanding of court proceedings.

Supervisors: Dr. Melanie Heto; Dr. Lauren Best

Deputy Probation Officer

Nov 2015 – Jun 2016

Arapahoe County Veteran Treatment Court (VTC)

Aurora, Colorado

Population/Setting: Adult Probation/ Specialty Court

- Supervised a caseload of high-risk, high-need adult military veterans serving on probation.
- Conducted monthly group sessions with VTC participants with service-related mental health diagnoses.

Supervisors: Dr. Lavita Nadkarni, Dr. Michael Karson, Dr. Apryl Alexander, Felicia Falcon

Deputy Probation Officer

Oct 2015 – Jun 2016

18th Judicial District Adult Probation Department

Littleton, Colorado

Population/Setting: Adult Probation

- Supervised a caseload of adult offenders serving probation sentences.

- Conducted weekly and bimonthly sessions with adult offenders and conducted periodic reassessment of offender risk for re-offense using semi-structured interviews.

Supervisors: Dr. Lavita Nadkarni, Dr. Michael Karson, Dr. Lynette Henderson-Metzger, Joshua Kaus

RESEARCH EXPERIENCE

Graduate Research Assistant/ Primary Investigator **Jan 2020 – Present**
Sam Houston State University
Huntsville, Texas

- Serving as principal investigator on a study examining archival data of adult state hospital patients committed for competency restoration treatment.
- Developing and Managing dataset as part of a dissertation project.

Supervisors: Dr. Jorge Varela, Dr. Marc Boccaccini

Graduate Research Assistant/ Co-Investigator **Aug 2017 – Sep 2019**
Sam Houston State University
Huntsville, Texas

- Served as co-investigator and collected data for a multi-site project supporting multiple studies.
- Administered self-report surveys and semi-structured interviews of military veteran and civilian offenders in Harris County and contiguous county veteran treatment courts (VTC), drug courts, and county jails.

Supervisors: Dr. Jorge Varela

Graduate Research Assistant **Aug – Dec 2017**
Sam Houston State University
Huntsville, Texas

- Coded data for a study comparing graduate student performance in written and computer-administered intelligence testing with the Wechsler Adult Intelligence Scale, Fourth Edition.
- Assisted in the establishment a database of testing data from multiple cohort pools.

Supervisor: Dr. Ramona Noland

Graduate Research Assistant **Mar – Jun 2017**
University of Denver
Denver, Colorado

- Assisted with faculty review/validation of Animal Abuse Risk Assessment Tool (AARAT).
- Drafted vignettes of criminal offenders and supervised filming of role players to be used for standardizing of measure.

Supervisors: Dr. Laura Meyer, Dr. Neil Gowensmith

Graduate Student Researcher **May – Sep 2016; Mar – Jul 2017**
Fostering Healthy Futures for Teens
Denver, Colorado

- Collected data through semi-structured, in-home interviews with caregivers and teens who had open child welfare cases in Denver area counties.
- Administered intelligence and achievement assessment measures to teens.

Supervisors: Dr. Heather Taussig, Allison Bratsch, Robyn Wertheimer

Research Assistant **May – Nov 2016**
The Resiliency Code
Aurora, Colorado

- Coded data collected from neuropsychological and medical screenings as part of project examining effects of positive psychology on spinal fusion surgery recovery outcomes.
- Assisted in the establishment a database of psychological data related to comprehensive fitness of individuals.

Supervisors: Dr. Chad Prusmack

Graduate Research Assistant **Oct 2015 – Apr 2017**
University of Denver
Denver, Colorado

- Coded data from neuropsychological functioning screenings of prison inmates with a history of traumatic brain injury.
- Attended planning meetings for a grant-funded multisite research study.

Supervisor: Dr. Kim Gorgens

RELATED WORK EXPERIENCE

Clinic Assistant **Sep 2016 – Jan 2017**
Sturm Center, University of Denver
Aurora, Colorado

- Conducted phone screens of potential clients at a clinic that provided therapeutic services tailored to veterans, active duty military, and their family members.
- Performed clerical tasks associated with billing, scheduling, and data management.

Supervisor: Dr. Kathryn Barrs

Clinic Assistant **Jan 2016 – Jun 2016**
Professional Psychology Clinic, University of Denver
Denver, Colorado

- Performed clerical tasks associated with billing, scheduling, and data management.
- Conducted phone screens of clients seeking mental health services.

Supervisor: Kate Ross, M.Ed.

MILITARY EXPERIENCE

Foreign Area Officer

Jan 2012 – May 2015

United States Army

- Conducted extensive study of Middle Eastern culture with overseas immersion assignment to Amman, Jordan and concurrent travel throughout the region.
- Drafted policy papers for senior Department of Defense officials and State Department personnel and coordinated projects with foreign military counterparts.

Intelligence Officer

May 2006 – Dec 2011

United States Army

- Served as Company Commander of a Human Intelligence (HUMINT) Company deployed to the Detention Facility in Parwan (DFIP), Afghanistan.
- Embedded as Intelligence Advisor for an Iraqi National Police unit in Baghdad, Iraq and trained Iraqi National Police unit in detainee operations and intelligence collection operations.

Armor Officer

Oct 2003 – Apr 2006

United States Army

- Served as Scout Platoon Leader of reconnaissance and surveillance assets of a heavy armored cavalry battalion. Deployed to New Orleans in support of Hurricane Katrina humanitarian relief efforts.
- Served as Tank Platoon Leader in Baghdad, Iraq, conducting daily, mounted reconnaissance patrols and interfaced with community and religious leaders.

TEACHING EXPERIENCE

Course Instructor – Psychology and Law

Spring 2021

Sam Houston State University

Huntsville, Texas

- Developed syllabus and overall course structure for an online undergraduate course, including assignments and exams.

Teaching Assistant - Intro to Doctoral Practicum

May – Jul 2019

Sam Houston State University

Huntsville, Texas

- Peer supervised two junior doctoral students in clinical work, graded class assignments for a graduate course.
- Provided formative and summative feedback related to acquisition of clinical skills.

Course Instructor - Abnormal Psychology

Fall 2018 – Spring 2019

Sam Houston State University

Huntsville, Texas

- Developed syllabus and overall course structure for an online undergraduate course, including assignments and exams.
- Supervised undergraduate student honors thesis project.

REVIEWER EXPERIENCE

Reviewer | Journal of Forensic Psychology Research and Practice | August 2021

- Served as a peer reviewer of manuscripts submitted for publication to this forensic psychology journal.

Student Reviewer | Law and Human Behavior | May 2019 – May 2020

- Review articles for publication under the supervision of a licensed psychologist/peer reviewer of manuscripts submitted for publication to the prominent forensic psychology journal.

PUBLICATIONS AND PRESENTATIONS

Camins, J., **Francis, J.**, Ridge, B., Brooks, C., Anderson, J., Varela, J. *Identifying PTSD in Veteran and Civilian Offenders: The Utility of the MMPI-2-RF and MMPI-3.* (2021). Poster presented at the annual convention of the American Psychological Association, Virtual.

Ridge, B., Camins, J., **Francis, J.**, Brooks, C., Anderson, J., & Varela, J. (2021). *MMPI-2-RF clinical profiles among justice-involved veterans.* Manuscript submitted for publication.

Camins, J.S., **Francis, J.**, Ridge, B.E., Brooks, C.L., Anderson, J.L., Varela, J.G. (2021). *Identifying Positive Screens for Probable Posttraumatic Stress Disorder in Justice-Involved Veterans and Civilians: The Utility of the MMPI-2-RF and MMPI-3.* Manuscript submitted for publication.

Francis, J., Camins, J., Ridge, B., Brooks, C., & Varela, J. (2020). Sensation seeking and criminogenic risk in justice-involved veterans. Poster presented at the American Psychology-Law Society Annual Conference, New Orleans, LA.

Camins, J., Ridge, B., **Francis, J.**, Brooks, C., & Varela, J. (2020). Exploring symptoms validity concerns and psychopathic traits among justice-involved veterans. Paper presentation for the American Psychology-Law Society Annual Conference, New Orleans, LA.

Camins, J., **Francis J.**, & Varela, J. (2019). Juror perception of risk factors for violence in veteran criminal defendants: What matters in an experimental paradigm. Poster presented at the Annual American Psychological Association Convention, Chicago, IL.

Long, T., Galicia, B., & Francis, J. (2019). Cultural plunges: A holistic discussion on implementing cultural training. Workshop presented at the 15th Annual Diversity Leadership Conference, Huntsville, TX.

Ridge, B., Camins, J., Francis, J., & Brooks, C. (2019). Service Members Among Us: Military Culture In & Out the Classroom. Workshop presented at the 15th Annual Diversity Leadership Conference, Huntsville, TX.

Noland, R., Schiafo, M., & Francis, J. (2018). Training impact of learning WAIS-IV administration by Q-Interactive versus traditional methods. Poster presented at the American Psychological Association annual conference, San Francisco, CA.

ACADEMIC AWARDS AND ACKNOWLEDGMENTS

University of Denver Graduate Commencement profile student	2017
Sturm Foundation Military Scholarship	2016, 2017
University of Denver Dean's Scholarship	2016, 2017
Bush School of Government and Public Service Scholarship	2014
Defense Language Institute Linguist Certification (Modern Standard Arabic)	2013
Association of the United State Army (AUSA) General Omar Bradley Scholarship	2002
Army Reserve Officer Training Corps Full-Tuition Scholarship	1998 - 2002

MILITARY AWARDS AND ACKNOWLEDGMENTS

Bronze Star Medal (2nd Oak Leaf Cluster)
 Purple Heart Medal
 Army Commendation Medal
 Army Achievement Medal
 National Defense Service Medal
 Afghanistan Campaign Medal (with Campaign Star)
 Iraq Campaign Medal (with Campaign Star)
 Global War on Terrorism Expeditionary Medal
 Global War on Terrorism Service Medal
 Humanitarian Service Medal
 Army Service Ribbon
 Army Overseas Service Ribbon
 NATO Medal
 Valorous Unit Award
 Meritorious Unit Commendation
 Combat Action Badge

SELECTED PROFESSIONAL TRAININGS

International Critical Incident Stress Foundation – Assisting Individuals in Crisis	2018
International Critical Incident Stress Foundation – Group Crisis Intervention	2018
Pawsitive Therapeutic Interventions - Animal Assisted Therapy	2016

PROFESSIONAL MEMBERSHIPS

Clinical Psychology Program Diversity Committee	2018 – 2021
Society for Military Psychology (Division 19), Campus Representative	2018 – 2020
University of Denver Student Veterans Association, Director of Alumni Relations	2016 – 2017
American Psychological Association, Student Affiliate	2015 – Present
American Psychology Law Society (Division 41), Student Affiliate	2015 – Present
1st Cavalry Division Association	Life Member
Military Order of the Purple Heart (MOPH)	Life Member

COMMUNITY SERVICE

Texas Commission on Law Enforcement – (Fall 2018) Assisted in crisis intervention training for law enforcement officers. Facilitated skill-building through simulated encounters with veterans.

Freedom Service Dogs – (Fall 2015-Spring 2017) Served as volunteer at facility that provides rescued dogs that are trained to be service animals for wounded military veterans and disabled civilians. Assisted with reinforcement of animal training and general operations in the facility.

Language Tutoring – (Spring 2013) Served as secondary instructor for Army Officer in language training. Facilitated acquisition of Modern Standard Arabic language.

Habitat for Humanity – (Summer 2011) Participated in roofing and construction of walls on two houses in west San Antonio housing development. Led a team of over 25 Soldiers and family members on the project.

Bastrop Wildfire Relief – (Fall 2011) Led group of approximately 20 volunteers to provide assistance at wildfire relief centers in city of Bastrop. Organized/stocked supply materials at donation centers.

Orphanage Program Coordinator – (1995-1997) Organized and directed a high school orphanage program that involved weekly visits to one of two locations where students provided assistance to orphanage staff in Moscow, Russia.

REFERENCES

Available upon request.