GENDER DIFFERENCES IN RATINGS OF CRIMINAL THINKING, PSYCHOSOCIAL FUNCTIONING, AND RESPONSE TO TREATMENT FOR INDIVIDUALS IN CORRECTIONAL SUBSTANCE ABUSE TREATMENT

by

JANIS TERESA MOREY

Bachelor of Science, 1979
Southwest Texas State University
(Currently called Texas State University)
San Marcos, Texas

Master of Education, 1998
University of Georgia
Athens, Georgia

Submitted to the Graduate Faculty of the
College of Science and Engineering
Texas Christian University
in partial fulfillment of the requirements
for the degree of

Master of Science

August 2006

ACKNOWLEDGEMENTS

It gives me great pleasure to express my gratefulness to all the special individuals that have invested themselves in me and my pursuit of this degree. First and foremost, however, I am thankful to Almighty God, whose strength and unfailing faithfulness is my constant source of courage. To my excellent committee, I owe a debt of gratitude. Dr. Don Dansereau is unquestionably for me the best match as a mentor. His powerful manner of speaking from his wealth of experience and expertise has guided me on the journey through the "black box" of completing this manuscript while continuing on the road toward my anticipative Ph.D. Dr. Sandra Dees shares my heart for female substance-abusing offenders. She has beautifully added to the committee's team spirit by her insight, research skills, and commitment and to me personally by her unselfish gifts of her time, talents, and valuable assistance with data analysis. Dr. Kirk Broome's statistical savvy and intelligence is unsurpassed. His knowledge of analyses combined with his quick wit has made learning complex concepts comprehendible. Additionally, I would like to extend my gratitude to Dr. D. Dwayne Simpson, for his supportive stance; to Dr. Patrick Flynn, for his behind the scene support; to Dr. Kevin Knight who from the beginning has been my advocate; to Dr. George Joe for his expert consultation; to Helen Huskey for her indispensable recommendations in the practical aspects of preparing this manuscript; and to my husband Gary, for his love and devotion. Along with appreciation to these and others who have encouraged me, I would like to offer a dedication in memory of my father who inspired me with his love of learning while exhorting me in the attainment of educational endeavors.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Introduction

This research addresses the question of gender differences in ratings of criminal thinking, psychosocial functioning, and treatment response for individuals in correctional substance abuse treatment. It also examines the relationship between these variables. Because race can influence the role of gender, racial differences are also examined to clarify the effects on gender. Included in this research are a review of the current literature and an examination of the measures of the criminal thinking, psychosocial, and treatment variables.

An abundance of criminal justice research suggests that incarcerated substance-abusing females and males of diverse racial groups differ both in the attitudes and behaviors that they bring to treatment, in addition to their specific treatment needs. Given these differences, this study addresses the questions of (a) gender differences on mean responses to Criminal Thinking, Psychosocial functioning, and Response to Treatment scales, (b) gender differences with respect to the degree to which Criminal Thinking and Psychosocial scales predict responses to substance abuse treatment, and (c) gender and racial interactions used to gain a larger perspective of how these variables influence one another.

The following introductory section of this paper provides a review of research pertinent to gender differences in criminality and criminal thinking, gender differences in psychosocial functioning and treatment needs, and the potential interaction of gender and racial identity. A synthesis of previous research and implications for this research, a description of the research context for this study, and an overview of research and theoretical underpinnings of the measuring instrument, the Texas Christian University

(TCU) *Criminal Justice Client Evaluation of Self and Treatment* (CJ-CEST) are also included.

Gender Differences in Criminality and Criminal Thinking

Females are the fastest growing population flooding into our criminal justice system (Henderson, 1998). Since 1990, the number of females in the United States (U.S.) criminal justice system has increased by 48% compared to 27% for males (Greenfeld & Snell, 1999). The growth in the number of incarcerated females is influenced by the alarming rates of female drug usage and drug related offenses (Henderson, 1998; Mauer, Potler, & Wolf, 1999; Surratt, 2003). Between 1982 and 1991, the number of females arrested for drug-related offenses, such as possession and trafficking, increased by 82% (Surratt, 2003). In contrast to male inmates, incarcerated females in 1991 were considerably more likely to have been arrested for a drug offense (Snell, 1994). Additionally, female state prisoners were more likely than male state prisoners (62% vs. 56%) to have used drugs in the month before their offense and were more likely (40% vs. 32%) to have been under a drug influence at the time of their offense (Mumola, 1999). These staggering statistics are a result of the U.S. continuing "war on drugs" combined with the changes in sentencing laws in many states (Henderson, 1998). Advancing those numbers even further is female offender recidivism, which is exacerbated by substance abuse, a major contributor for return to custody for parole violations (Henderson, 1998).

On average, in response to serious life problems, males are more likely to develop criminal thinking and deviant behavior while females, in contrast, are at greater risk for developing physical and psychological health issues (Byqvist, 1999). However, evidence

of a small "criminal group" has been found among female offenders, although it appears to be a limited percentage of that population. A study conducted by Byqvist (1999) revealed that a minor group (n = 42) of females in the prison population studied portrayed behavior indicative of a criminal group in that they exhibited early and intensive juvenile delinquency patterns, early drug debuts, and rapid transition into regular and extensive adult crime. The frequency and pattern of their criminality differed appreciably from the other females in the study (n = 351). The study supports the notion that there are fewer female "criminals" than males.

For male offenders, criminal thinking can have a powerful effect on behavior, producing a lifestyle steeped in drugs, criminal acts, and increasing rates of recidivism (Walters, 1998). According to Gornik (2004), dealing with criminal thinking is the single most important part of public safety and offender change. But where does criminal thinking begin? Previous research (Walters, 2003) indicates that prison environments often create opportunities to associate with criminally oriented individuals whereby individuals entering prison with non-criminal identities may form more deviant identities. Walters supports this notion of criminal identity as possibly the inception and development of criminal thinking and conduct for many in the criminal justice population. His work suggests that life in a medium-security institution might well encourage individuals unfamiliar with prison life to embrace such attitudes for protection as well as survival against the physical and psychological adversity associated with incarceration. In their more recent research, Walters and Geyer (2004) found that the ability to enter into normal conventional relationships with others, either personally or professionally may protect against developing a criminal social identity. For example,

married or previously married individuals or those who were involved in a professional partnership are less likely to form a criminal social identity. In contrast, drug users with a criminal mentality typically shun relationships thereby avoiding closeness and intimacy often in part because these relationships decrease the amount of time that can be spent in drug-related activities (Walters, 1998). Gornik (2004) agrees with Walters suggesting that those who possess criminal thinking experience relationships with others that are adversarial, perceiving compassion or other emotional displays as signs of weakness. Gornik finds that these relationships are dominated by a struggle for power and cooperation is "seldom more than a passing convenience" (Gornik, 2004, p. 37-5). To individuals who possess criminal thinking, winning is achieved by forcing someone else to lose, and the win-lose orientation dominates relationships. Through their winning, criminal thinkers experience the only real satisfaction and gratification they have ever learned, further reinforcing their behavior. Self-indulgence is also readily evident with egocentric attempts to achieve immediate self-gratification regardless of the negative long-term consequences (Walters, 1998).

Further, Gornik (2004) states that many male offenders have adopted thinking patterns that create a sense of entitlement and self-validation that rewards irresponsibility. He reports that many offenders have learned to behave defiantly and with hostility resulting from their perceptions of having received unfair treatment. In some criminal thinking individuals, feeling like a victim of society creates strong emotional responses that find satisfaction in street survival, fighting and revenge. Additionally, a familiar role for these individuals is that of an imposter, where deception and putting on appearances is common (Walters, 1998). Moreover, they frequently violate the rights of others with

privacy, dignity and/or personal space infringed upon. Murder, rape, robbery, burglary and even purse snatching are clear examples of crimes of intrusion (Walters, 1998).

Criminal thinking offenders in criminal justice treatment frequently find change laborious because their thinking patterns have deep roots. For the experienced inmate who has developed a sense of pride in his identity as a criminal, justification and rationalization of actions along with cognitive dissonance may serve as fuels that make the treatment process and change difficult (Walters, 2003). Offenders may require a considerable period of de-conditioning and re-conditioning in treatment to extinguish old entrenched behaviors and reinforce appropriate ones (Gornik, 2004). Walters (1998) writes that change may need to begin with a crisis. He explains that only after problems develop and one's lifestyle begins to fall apart, are individuals usually motivated to consider the possibility of treatment and changing thought patterns. Structure and accountability are useful elements of guiding offenders to bring about change and learn self-regulation and self-management. Prison staff acting as rational authorities provide treatment whereby values, rules, and responsibilities are enforced while teaching pro-social ways of thinking to effectively reduce criminal thinking in even severely criminogenic and violent offenders (Gornik, 2004).

Gender Differences in Treatment Needs and Psychosocial Functioning

Since fewer incarcerated females have criminal histories or evidence of pervasive criminal thinking, the extent to which these tendencies can be assessed and used in planning for treatment or rehabilitation is not known. Gender studies have long shown that substance-abusing female offenders have needs that are considerably different from the needs of substance-abusing male offenders. The differences are seen in distinctive

etiology, disease progression, and concomitant treatment needs with complex, intertwined pathways to drug use and addiction (Ashley, Marsden, & Brady, 2003; Covington & Bloom, 2000; Staton, Leukefeld, & Webster, 2003). It has been shown that female offenders exhibit a variety of emotional, cognitive and behavioral symptoms which stem from extensive histories, beginning in childhood, of physical abuse, sexual abuse (including incest), and trauma, leading to compromised mental, emotional, and/or physical health (Mauer et al., 1999; Young, Fluellen, & Belenko, 2004). Unlike substance abusing male offenders, female offenders who abuse drugs more often report greater family of origin dysfunction and a lack of adequate parenting role models (Byqvist, 1999; Chatham, Hiller, Rowan-Szal, Joe, & Simpson, 1999). They have more substance-abusing relatives and experience less family support with more family problems (Davis & DiNitto, 1996; Kingree, 1995). Knight, Cross, Giles-Sims, and Simpson (1995) found that a link exists between perceptions of childhood family environments and psychosocial functioning in adulthood. Specifically, growing up in a dysfunctional family places an individual at risk for poorer psychosocial functioning and the likelihood of drug use as a means of self-medication (Knight et al., 1995; Pelissier, 2004). For example, women often use drugs to cope with depression, stressful life events, and trauma or family pressure, whereas male drug use is more closely associated with an antisocial behavior pattern (Hser, Anglin, & McGlothlin, 1987), and/or use of drugs for thrill or pleasure (Inciardi, Lockwood, & Pottieger, 1993).

Previous research shows that female substance abusing offenders consistently differ from male substance abusers on several psychosocial functioning dimensions (Kingree, 1995; Pelissier et al., 2001). Female substance abusing offenders are more

likely than men to have low self esteem (Kingree, 1995), dependency and limited interpersonal and resource networks (Taylor, 1996), guilt and high rates of mental health issues such as depression (Byqvist, 1999; Johnson, Brems, & Burke, 2002; Pelissier, 2004; Peters, Strozier, Murrin, & Kearns, 1997), eating disorders, posttraumatic stress disorder (PTSD), psychosis (Ashley et al., 2003; Henderson, 1998; Johnson et al., 2002), and dual diagnoses (Henderson, 1998). Additionally, female offenders and females admitted to inpatient drug treatment were found to have higher rates of anxiety disorders than males (Brady, Grice, Dustan, & Randall, 1993; Peters et al., 1997; Taylor, 1996), although anxiety is higher for the female population in general (Brady et al., 1993). In a study that assessed gender differences at admission and follow-up in a sample (n = 435) of methadone maintenance clients (Chatham et al., 1999), females were shown to have higher severity scores for psychosocial issues at admission and at follow-up. In fact, at follow-up alone, after six months of treatment, females were medically prescribed more psychotropic medications than males. Moreover, female offenders more often than males attempt suicide and self-inflict harm which often occurs from a combination of adjusting to the prison environment, separation from family, and from various mental issues (Neale, 2004; Van Wormer, 2001). In a study conducted by Peters et al. (1997), female inmates were shown to have more: (1) multiple psychological functioning problems; (2) issues related to economic support (earning almost five times less than males); (3) crack/cocaine dependence (the drug of choice); and (4) histories of physical and sexual abuse. Bloom, Lind, and Owen (1994) found that illegal drugs combined with high levels of physical and sexual abuse have been shown to contribute to increasing rates of recidivism among female offenders.

Simpson, Joe, Knight, Ray, and Watson (1992), found psychosocial functioning played a major role in substance abuse treatment. Their research found anxiety to be higher in young, uneducated, white females, and positively correlated with risk-taking and perceptions of drug use problems. Further, they reported decision-making to be impaired with the presence of depression, anxiety and drug use problems. Based on prior treatment research by Joe, Knezek, Watson, and Simpson (1991), higher levels of depression were found to be associated with poor decision-making; however, assessing and treating depression dramatically decreased risky behavior. Additionally, their findings revealed that decision-making is a crucial factor in recovery hindering treatment success, unless participants can learn to make better decisions.

Gender and Racial Identity

Since male and female roles can differ across racial groups, gender differences relevant to the present study may be influenced by racial identity. Previous research has shown that race matters among incarcerated females. In 1991, female state inmates largely resembled male inmates in terms of race with most likely to be Black (Snell & Morton, 1991). Of the female offenders under probation supervision, nearly two-thirds were White, while nearly two-thirds of those confined in local jails, state and federal prisons were a minority – Black, Hispanic or other race (Greenfeld & Snell, 1999). Jones and McJetters (1999) found that Black female homicide offenders when compared with White homicide offenders are significantly younger and may be more likely to murder for financial gain, while their White counterparts appear more likely to murder intimates.

Among substance abusing offenders, there were few differences between male and female probationer percentages of reported drug use, yet regarding race, Whites and

Blacks reported higher levels of prior drug use patterns (Mumola & Bonczar, 1998). At the Federal level, higher percentages of males than females reported past drug use (74%, compared to 63% of women) with Hispanics reporting the lowest levels of prior drug use at 46%, compared to 62% for Blacks and 64% for Whites (Mumola, 1999). Further, White female jail offenders represented 43% of females in jail; likewise, they also represented 48% of females who were dependent on or abused alcohol or drugs. Similarly, White males represented 35% of males in jail but 40% of males who met the criteria for substance dependence or abuse (Karberg & James, 2005).

Summary of Previous Research and Implications for Present Research

Most criminality and criminal thinking research has been conducted using male offenders, although females are flooding into the criminal justice system due to drug use and drug related offenses (Henderson, 1998). Previous research (Byqvist, 1999) has shown that only a small percentage of female offenders possess a "criminal mind." Most female offenders present with severe abuse patterns, complex psychological problems, and rapid drug abuse careers, however, although criminal-thinking females may also suffer largely with the same issues, their criminality may differ appreciably from many substance abusing female and male offenders. Generally, treatment for criminal thinking males reveal that change is difficult (Walters, 2003) while much is unknown about treatment for the small percentage of females with criminal thinking patterns. The present study was designed to extend the small body of research on criminal thinking differences between genders and to explore the extent to which criminal thinking indicators can predict response to substance abuse treatment.

As noted, the research literature abounds with examples of gender differences in psychosocial functioning. Female offenders exhibit a variety of emotional, cognitive and behavioral symptoms which stem from extensive histories, beginning in childhood, of physical abuse, sexual abuse, and trauma (Young et al., 2004). Differences are also clearly seen in non-criminal justice populations, with more females than males exhibiting greater amounts of depression, anxiety, and complex psychological problems. The present study replicated previous research on gender differences in psychosocial functioning and examined the contribution of psychosocial variables to the prediction of treatment perceptions in males and females.

Previous research has revealed that male and female offenders can differ across racial groups (Karberg & James, 2005). Therefore, in light of the potential influence that the gender and racial interaction may have on the questions addressed, this research examined the impact of race on criminal thinking and psychosocial functioning in predicting correctional treatment response for males and females.

Because this study examined genders and gender-related racial group differences with respect to criminal thinking and psychosocial variables, and the ability of these variables to predict perceptions of treatment, it was necessary to have an integrated measurement instrument that included these three major factors. It was also necessary to have a sample of males and females that were in comparable criminal justice settings. Therefore, the next section will describe the context for the research and will discuss the CJ-CEST as an instrument that integrates these three major factors.

Research Context and Instrumentation

This study was undertaken with data collected for the Criminal Justice Drug Abuse Treatment Studies (CJ-DATS) project. This is a 5-year cooperative agreement grant project funded by the National Institute on Drug Abuse (NIDA) to investigate key prison-based treatment systems in the U.S. and to make recommendations for policies to enhance outcomes and improve the overall efficiency of treatment service delivery. Additionally, an important objective for CJ-DATS is the establishment of science-based evidence for the role of corrections-based treatment in reducing drug use and crime-related costs to society. A critical part of CJ-DATS is the development of performance assessments. The CJ-CEST is one measurement that was explored for this purpose.

The CJ-CEST questionnaire is intended to illuminate the important "client" elements in the treatment process (see Appendix for instrument). It is directly linked to the evidence-based TCU Treatment Process Model, a conceptual model of treatment that, based on available research, represents the essential and interrelated factors that are key to treatment effectiveness (see Figure 1). These interrelating factors include client, therapeutic, and environmental predictors that lead to a better understanding of what promotes retention in treatment (a key indicator of treatment success) and positive outcomes. The Model lays out sequential therapeutic elements within the "black box of treatment" that work synergistically over time. As illustrated in Figure 1, the key ingredients of treatment are influenced by client attributes at intake, staff attributes and skills, and program participation together with the therapeutic relationship (Simpson & Knight, 2001a). While all of these factors are important to treatment effectiveness (as measured by retention in treatment and the absence of drug dependence), increased levels

of treatment participation (e.g., increased counseling session attendance), rapport with counselor, and client confidence in treatment contribute significantly to positive behavioral changes and psychosocial functioning later in treatment (Simpson & Knight, 2001b).

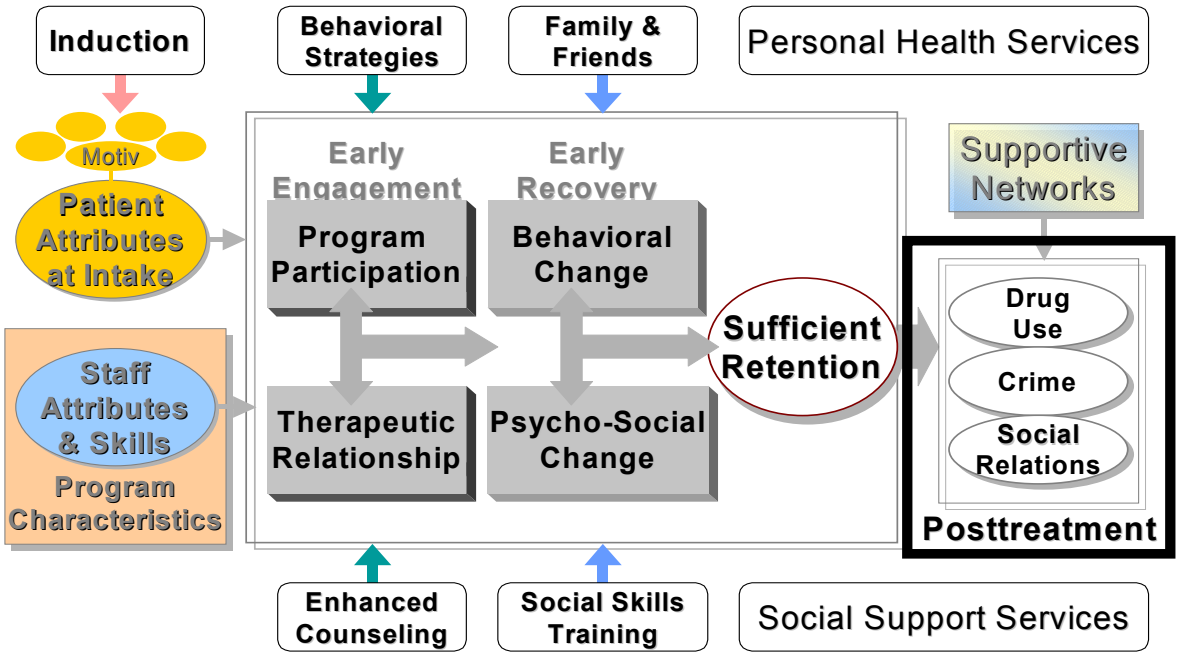

Figure 1. The TCU Evidence-Based Treatment Process Model.

The CEST (Client Evaluation of Self and Treatment) is an instrument that was developed, administered and researched over a 10-year period in conjunction with grants to develop drug abuse treatment strategies to help reduce dropout, relapse rates, and AIDS-risky behaviors among injecting drug users (Simpson, Joe, Dansereau & Chatham, 1997). The instrument has evolved over time, beginning as the TCU Self-Rating Form (TCU/SRF), a pretreatment assessment for motivation (Simpson & Joe, 1993) and

psychosocial functioning (Simpson, Joe, Rowan-Szal, & Greener, 1995). This early work and subsequent refinements have culminated in a during-treatment assessment instrument. Knight, Holcom, and Simpson (1994) concluded that the TCU/SRF provided a quick and reliable self-reported psychosocial and motivational profile assessment of substance abusers.

Extension to Criminal Justice. Recent revisions to the assessment to make it appropriate for use in criminal justice correctional settings (i.e., creating the CJ-CEST) included slight rewording and the inclusion (part two) of criminal thinking and attitude scales (Personal Irresponsibility, Criminal Rationalization, Street Values, Cold-Heartedness, Power Orientation, Entitlement, and Mollification) that were revised and heavily modified versions of scales developed by Walters (1995a, 1995b, 1996; Walters & Geyer, 2005), and the Federal Bureau of Prisons (BOP) Survey of Program Participants (available from the BOP Office of Research and Evaluation). Pilot research with substance abusing offenders (n = 667) at six BOP facilities (Knight, Simpson, & Morey, 2002) and a conceptual review of the findings with BOP leadership provided the basis for scale revisions. The data collected from that research demonstrated the reliability and utility of the correctional version of the CEST for providing a brief self-reported psychosocial and motivational profile assessment of incarcerated offenders. It also established the reliability of the revised criminal thinking scales (Knight, Garner, Simpson, Morey, & Flynn, 2006).

Study Objectives

This study addressed the questions of (a) gender differences on mean responses to the Criminal Thinking, Psychosocial functioning, and Response to Treatment scales of

the CJ-CEST, (b) the degree to which gender, Criminal Thinking and Psychosocial scales predict Responses to substance abuse treatment, and (c) for both (a) and (b), the extent to which racial group membership influences these results. It was anticipated that fostering awareness of specific gender and racial differences in these three important domains would (a) facilitate identification of individuals who respond most positively to treatment, potentially affecting the use of scarce treatment dollars; (b) facilitate the tailoring of treatment to offenders' specific needs; and (c) better predict treatment success as measured by treatment engagement, treatment retention, and recovery. To recap, this research focused on the following specific questions:

1. How do male and female responses differ with respect to scales on the CJ-CEST related to criminal thinking (i.e., Cold Heartedness, Street Values, Entitlement, and Personal Irresponsibility)?
2. How do male and female responses differ with respect to scales on the CJ-CEST related to psychosocial issues (i.e., Anxiety, Depression, Self Esteem, and Decision-Making)?
3. How do male and female responses differ with respect to scales on the CJ-CEST related to response to treatment (i.e., Treatment Participation, Treatment Satisfaction, Counseling Rapport, and Peer Support)?
4. In predicting response to treatment, are predictive relationships using these important variables (Criminal Thinking and Psychosocial scales) similar for males and females?
5. Does gender interact with race in answering the four questions above?

Method

Participants

The Performance Indicators for Corrections (PIC) cross-sectional data targeted for this research were collected from 951 offenders -- 396 males and 555 females -- in two Texas Department of Criminal Justice (TDCJ) In-Prison Therapeutic Community (IPTC) substance abuse treatment programs: one adult male facility and one adult female facility, with all beds at both facilities dedicated to treatment. The time in treatment criteria ranged from 10 days to 235 days. Therefore, if a participant's time in treatment fell within that range of time; the data were included in the data analyses; if the treatment time fell outside that range, the data were excluded. Of the 438 males and 561 females initially in the dataset, 396 males and 555 females met the time in treatment criteria. The mean age was 41 years for males and 34 years for females. Of the male sample, 170 (44%) were Black, 134 (33%) White, and 92 (23%) Hispanic. Of the female sample, 160 (29%) were Black, 300 (54%) White, and 95 (17%) Hispanic. Male and female groups differed significantly on age ($F = 120.26$; $p <. 0001$) and ethnic/racial distribution (*Chi-square* = 40.92; $p < .0001$) but not on time in treatment. Table 1 provides a description of sociodemographic characteristics.

Instrumentation

The CJ-CEST utilizes a 5-point Likert scale from 1 = "Disagree Strongly" to 5 = "Agree Strongly" and includes a total of 24 scales which represent conceptually distinct key factors as delineated in the TCU Treatment Process Model. Part one of the CJ-CEST is a 130-item, 17-scale assessment based on an adaptation of other TCU scales, including

Table 1

Demographic Characteristics of Male and Female Participants in this Study (N = 951)

Variables	Females	Males
Number in Sample	555	396
Age in years		
Range	18-60	22-68
Mean	34.43	41.15
Time in Treatment (days)		
Range	15-235	10-212
Mean	105.9	109.13
Race/Ethnicity		
Black	160 (28.80%)	170 (43.88%)
White	300 (54.20 %)	134 (32.85%)
Hispanic	95 (16.99%)	92 (23.26%)

three motivational scales (Desire for Help, Treatment Readiness, and External Pressures), five psychosocial functioning scales (Self-Esteem, Depression, Anxiety, Decision-Making, and Self-Efficacy, with Self-Efficacy based on the Pearlin Mastery Scale), three social functioning scales (Hostility, Risk Taking, and Social Conformity), and six treatment process domains (Treatment Needs, Treatment Participation, Treatment Satisfaction, Counselor Rapport, Peer Support, and Social Support).

Part two of the CJ-CEST consists of 56 "criminal thinking" items, which are the basis for seven scales: Personal Irresponsibility, Criminal Rationalization, Street Values, Cold Heartedness, Power Orientation, Entitlement, and Mollification**.** The CJ-CEST instrument and scoring guide, which identifies specific items in each scale, is available in the Appendix.

CJ-CEST Utilized in the Study. Twelve scales were chosen for this study because they were particularly interesting and deemed potentially useful by prior literature in reflecting how males and females differ from one another. For the purposes of this study, four of the Criminal Thinking scales were examined: Cold Heartedness, Street Values, Entitlement, and Personal Irresponsibility. For the Criminal Thinking scales, higher scores are indicative of greater negativity in criminal thinking. Cold-Heartedness (eight items) portrays the depth (or lack) of emotional involvement that the criminal has in his relationship with others. Street Values (eight items) provides information about the criminal's attitude toward self-protection and survival on the streets. Entitlement (seven items) is indicative of the extent to which an individual feels that his or her ownership of privileges or benefits is automatic and unrelated to societal restrictions (i.e., the world "owes them"; they deserve special consideration and they perceive themselves to be above the law). Personal Irresponsibility (eight items) involves a lack of accountability and a general unwillingness to accept ownership for actions and for choices and is also reflective of an unwillingness to accept responsibility, including a readiness to cast blame upon others.

Responses to four Psychosocial scales were also examined in this study: Anxiety, Depression, Self-Esteem, and Decision-Making. Anxiety has seven items including

measures of excessive nervousness, increased arousal and/or apprehension as well as restlessness, difficulty concentrating, irritability, muscle tension, disturbed sleep and fear. The Depression scale (six items) measures the degree to which the participant is experiencing pervasive feelings of sadness, fatigue, worry, loneliness, low self-esteem, and hopelessness. The Self-Esteem scale (six items) is an indicator of self-respect that is assessed by feelings of self-satisfaction, pride, and the sense of one's own value or worth as a person. Decision-Making (nine items) provides information about the act or process of deciding, planning, problem solving, risk assessment, and the impact one's actions will have on others.

The treatment scales used in this study served primarily as criterion measures. These scales are Treatment Participation, Treatment Satisfaction, Counselor Rapport, and Peer Support. Higher scores on the Response to Treatment composite indicate a more positive response to treatment. Treatment Participation (twelve items) focuses on a willingness to participate in group sessions, and to receive and provide input from counselors and peers. Treatment Satisfaction (seven items) is a general indicator of the extent to which the overall program is perceived as helpful. It evaluates the time schedule, organization, location convenience, staff efficiency, and general overview of the treatment in meeting the participant's needs. Counselor Rapport (thirteen items) focuses exclusively on the relationship between the participant and his primary counselor. It provides information about the extent to which the counselor is perceived as helpful (e.g., encourages, understands, motivates, respects, prepares). Peer Support (five items) deals with the relationship that the participants have with one another, revealing

perceptions of similarity or differences to others in the program and the extent of trusting and caring among participants.

In summary, the Criminal Thinking scales targeted in this research are: Cold Heartedness, Street Values, Entitlement, and Personal Irresponsibility. Psychosocial scales chosen for this project include Anxiety, Depression, Self-Esteem, and Decision-Making. For these analyses, ratings on Anxiety and Depression were reverse scored to be the same as higher ratings on Self-Esteem and Decision-Making so that higher ratings on any of the four scales means better Psychosocial functioning. Treatment Response scales used in this study were: Participation in Treatment, Treatment Satisfaction, Counselor Rapport, and Peer Support.

Procedure

CJ-CEST questionnaires were administered and collected from October 2003 to October 2004 as a part of the PIC project. Prior to data collection, project approval was obtained from the TCU Institutional Review Board (IRB), and TDCJ. Written consents and protected health information authorizations were obtained from individuals who agreed to participate after a full explanation of the project was provided along with a question and answer time. No participation incentives were offered.

Administration of the CJ-CEST was structured so that participants were directed to follow along as designated treatment staff read the directions and each item aloud. Reading items aloud helped accommodate the participants with poorer reading and language skills. Also, whenever necessary, bilingual participants were paired with non-English speaking participants to translate the items being read aloud. Although participants were encouraged to seek clarification for items they did not understand, they

were also instructed to leave items blank that they did not feel comfortable answering or that continued to be unclear after an explanation was given. Assessments were completed in approximately 45 minutes.

Results

Preliminary Analyses

In order to consolidate the data into a more manageable form for further analyses, principal components factor analyses were conducted on each of the sets of variables. Factor analysis of the four Criminal Thinking scales led to a single factor containing the following factor loadings: Street Values (.80), Entitlement (.86), and Personal Irresponsibility (.81). These were averaged to form a single composite for subsequent analyses entitled Criminal Values. Since Cold Heartedness, however, loaded at < .50 on this criminal thinking composite factor, it is treated as a separate variable in subsequent analyses and is simply named Cold Heartedness. Nevertheless, although Criminal Values and Cold Heartedness have been separately named for analytic purposes, it is recognized that both the composite and single scale represent important aspects of Criminal Thinking.

Factor analysis of the four Psychosocial scales indicated a single factor with the following loadings: Anxiety (.84), Depression (.80), Self Esteem (.77), and Decision-Making (.66). Likewise, these scores were also averaged to form a single composite for subsequent analyses.

Finally, factor analysis of the four Response to Treatment Scales indicated a single factor with the following loadings: Treatment Participation (.80), Treatment

Satisfaction (.83), Counselor Rapport (.79), and Peer Support (.79). The averaging of these scores provided the single composite used in all subsequent analyses.

Primary Analyses

In dealing with the first four research questions, the role of race (question five) was included in each analysis. A Multivariate Analysis of Covariance (MANCOVA) was conducted to address questions one and two. In this analysis, the Criminal Values and Psychosocial composites and Cold Heartedness were the three dependent variables (DVs), with gender, race, and the interaction of gender and race as the independent variables (IVs), and age and time in treatment as covariates. The overall MANCOVA was significant at $p < .0001$ for both gender and race but not for the interaction. ANCOVAs were then conducted to examine the univariate effects. To address question three, a separate Analyses of Covariance (ANCOVA) was performed with the Response to Treatment composite as the DV, gender and race as the IVs, and age and time in treatment as covariates. Multiple regression analyses were conducted to address question four, with the Response to Treatment composite serving as the DV.

Research question 1. Are there gender differences with respect to the CJ-CEST Criminal Thinking scales? Are there race effects with reference to these scales? The related univariate analysis, ANCOVA, for the Criminal Values composite revealed a significant effect for race, F (2, 947) = 15.30, $p < .0001$ and for the covariate age, F (1, 947) = 6.49, $p = .0110$. Scheffe's post hoc analyses revealed significant differences at the 0.05 level between Hispanics (M = 2.20) and Whites (M = 1.98), and Blacks (M = 2.13) and Whites (see Figure 2).

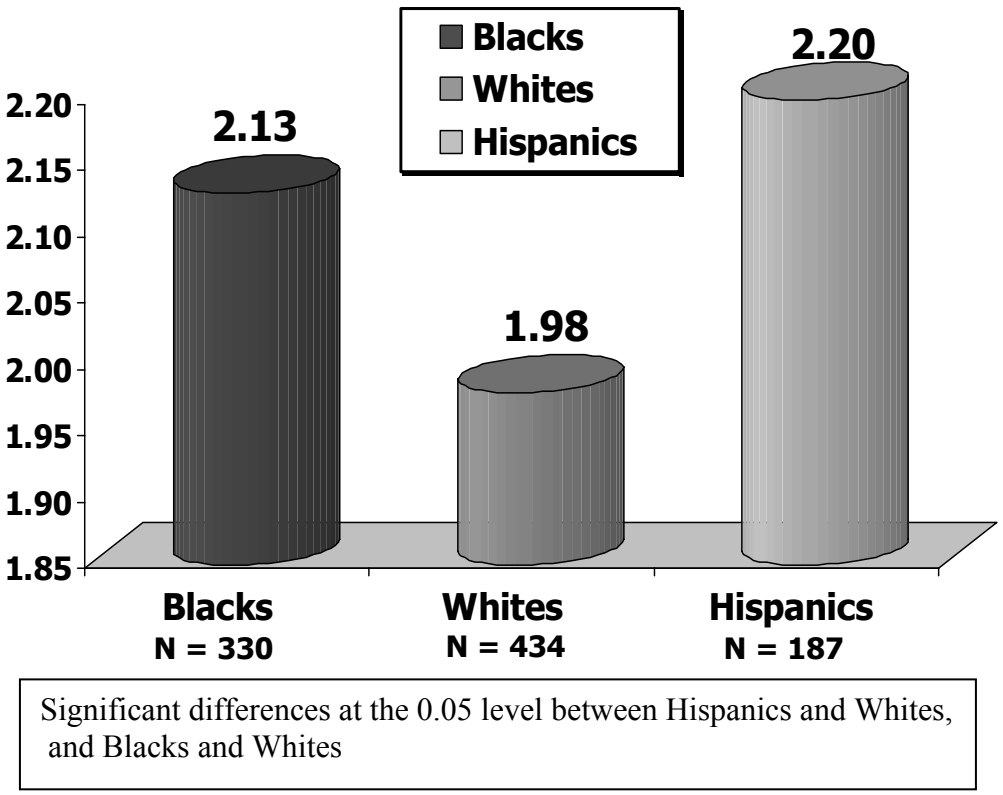

Figure 2. Criminal Values Composite, Mean Scores by Race.

Univariate analyses for Cold Heartedness revealed a significant effect only for gender F (1, 947) = 28.83, $p < .0001$. Examination of the means indicated males (M = 2.23) had higher mean scores than females (M = 2.01). See Figure 3 for Cold Heartedness means by gender. There were no significant race comparisons for Cold Heartedness. In summary, with respect to the first research question, males showed greater levels of Cold Heartedness than females and there were no differences between genders with respect to Criminal Values. Hispanics and Blacks did not differ on any of the Criminal Thinking scales although they were significantly higher than Whites on

Criminal Values, but not on Cold Heartedness. Finally, there were no interactions between gender and race with respect to Criminal Thinking.

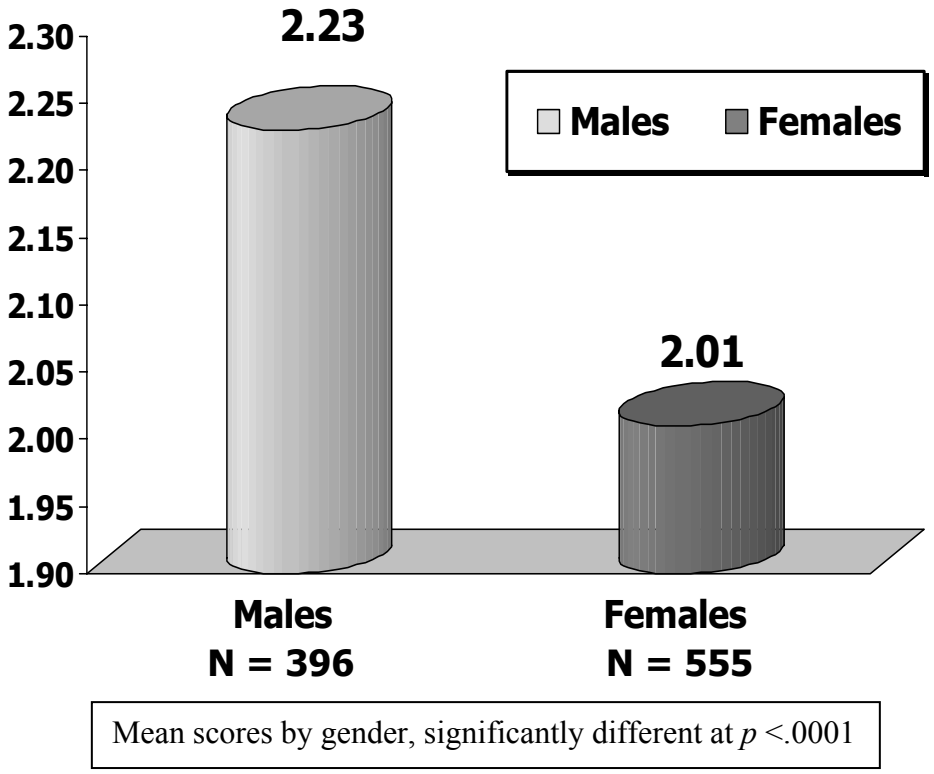

Figure 3. Cold Heartedness, Mean Scores by Gender.

Research question 2. Are there gender differences with respect to the CJ-CEST Psychosocial scales? Are there race differences regarding these scales? Analysis of Covariance with respect to the Psychosocial functioning showed significant effects for gender F (1, 947) = 54.00, $p < .0001$ and race F (2, 947) = 3.97, $p = .0192$; the covariates of time in treatment F (1, 947) = 5.60, $p = .0181$; and age F (1, 947) = 7.22, $p = .0073$ were also significant. Examination of the means for gender indicated males (M = 3.63) were higher than females (M = 3.35). Scheffe's post hoc analysis indicated comparisons between Black (M = 3.55) and White (M = 3.50), and Black and Hispanic (M = 3.42)

were significantly different at the 0.05 level (see Figure 4). In summary, with respect to the second research question, males showed higher levels of Psychosocial functioning than females, and Blacks higher Psychosocial functioning than Whites and Hispanics, who do not differ. There were no interactions between gender and race.

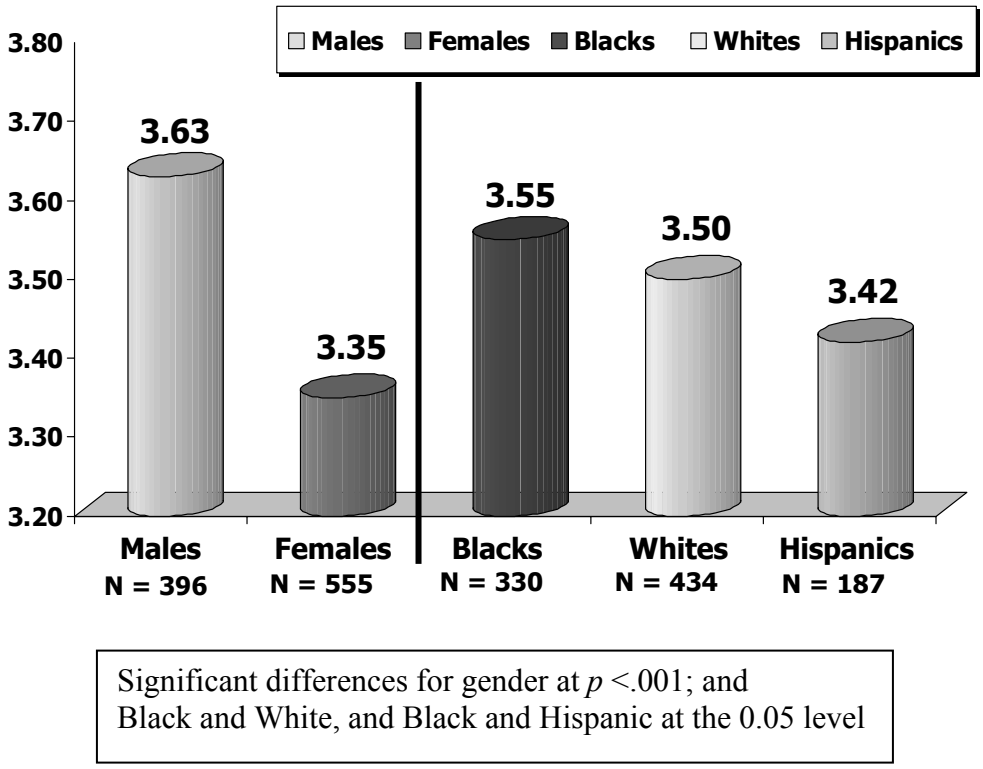

Figure 4. Psychosocial Composite, Mean Scores by Gender and Race.

Research question 3. Are there gender differences with respect to the CJ-CEST Treatment Response scales? Are there race differences with these scales? ANCOVA findings for the Response to Treatment analysis revealed a significant main effect for gender F (1, 950) = 21.38, p < .0001. Both time in treatment F (1, 950) = 24.64, p = < .0001) and age F (1, 950) = 5.03, p = .0251, covariates were also significant. An examination of male mean scores (M = 3.85) and female means (M = 3.71) indicated

male scores were higher (see Figure 5). There were no significant race comparisons for the Response to Treatment composite. In addition, there were no race by gender interactions.

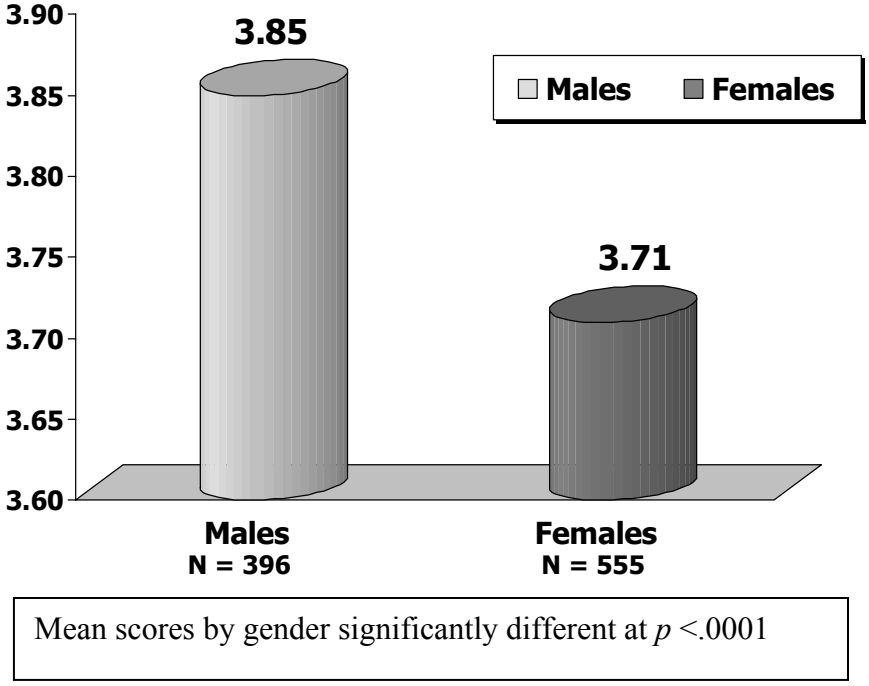

Figure 5. Treatment Response, Mean Scores by Gender.

Research question 4. In predicting response to treatment, are predictive relationships using the Criminal Thinking and Psychosocial composite scales, similar for males and females? Does race interact with gender to influence these results? Multiple regression analyses were performed to address these questions, with the Response to Treatment composite serving as the DV. The Criminal Values and Psychosocial composites, Cold Heartedness, age, time in treatment, and dummy variables representing

interactions for each level of the gender and race variables (i.e., Black/White/Hispanic and male/female) were entered into the regression model simultaneously as predictors of response to treatment. The overall model was not significant for gender or race, but was significant for the Criminal Values and Psychosocial composites, Cold Heartedness ($p < .0001$ for each), and for time in treatment ($p = .0002$). Significant interactions were found for Criminal Values by race ($p = .0007$) and Cold Heartedness by race ($p = .0168$).

Parameter estimates with respect to these interactions revealed that Criminal Values was a significant predictor of Response to Treatment for White (parameter estimate = -.3276; $p < .0001$) and Hispanic (-.1967; $p = .0285$) offenders. Further, Cold Heartedness was a significant predictor for Whites (-.1579; $p = .0020$), Hispanics (-.2613; $p = .0008$) and Blacks (-.3601, $p < .0001$).

An examination of the confidence intervals indicated that Criminal Values was a better predictor of Response to Treatment for Whites and Hispanics than for Black offenders, while Cold Heartedness was a stronger predictor for Blacks than for Whites. Table 2 shows parameter estimates and confidence intervals for the significant interactions.

In summary, with respect to research question four, Criminal Values, Cold Heartedness, and the Psychosocial functioning composite were significant predictors of response to treatment. There were no differences in the level of predictions based on gender, but Criminal Values was a significant predictor for Whites, less so for Hispanics but not for Blacks. For Cold Heartedness, predictors for Hispanics did not differ from those of Whites or Blacks.

Table 2

Criminal Thinking Measure by Racial Group: Significant Predictors of Response to Treatment

	Estimate	Significance	95% Confidence Limits
Cold Heartedness			
Black	-.3601	$p < .0001$	-.4559 to -.2643
Hispanic	-.2613	$p = .0008$	-.4130 to -.1095
White	-.1579	$p = .0020$	-.2579 to -.0580
Criminal Values			
Black	.0121	*not significant*	-.1052 to .1295
Hispanic	-.1967	$p = .0285$	-.3727 to -.0208
White	-.3276	$p < .0001$	-.4591 to -.1963

Discussion

Gender and racial differences have been identified in criminal justice research literature suggesting that incarcerated substance-abusing females and males of various racial groups differ in both the attitudes and behaviors that they bring to treatment, in addition to their specific treatment needs. In light of these differences, this study addresses the questions of (a) gender differences on mean responses to Criminal Thinking, Psychosocial functioning, and Response to Treatment scales, (b) gender differences regarding the degree to which the Criminal Thinking and Psychosocial scales predict responses to substance abuse treatment, and (c) gender and racial interactions in answering (a) and (b).

The outcomes regarding gender on the Criminal Thinking scales indicated males and females did not differ in Criminal Values but males reported higher levels of Cold Heartedness. Walters (2001) also found a mixed pattern of gender differences on three of the four criminal thinking scales measured by the Psychological Inventory of Criminal Thinking Styles (PICTS). The four PICTS scales utilized in Walters' study were: Problem Avoidance scale, Self-Deception/Assertion scale, Interpersonal Hostility scale, and Denial of Harm scale, only the Problem Avoidance scale attained significance ($p < .01$) with males scoring lower than females; the other three were not significant. The present study provides a slightly different view of gender differences that requires reporting.

The current study's results also have important racial implications. The examination of means in post hoc analyses indicated Blacks and Hispanics did not differ in Criminal Values but both had higher levels than Whites. Although the three racial groups did not differ on the Cold Heartedness scale, the findings suggest that Blacks and Hispanics may require additional programming to alter the kind of thinking and behavior patterns that underlie the Criminal Values composite.

If replicated, results for both Criminal Values and Cold Heartedness have implications for treatment assessment and planning. This difference between genders on Cold Heartedness but not Criminal Values is important in tailoring treatment programs. Therefore, the findings may indicate a need for providing specialized training. Efforts should concentrate on assessing offenders when they enter treatment (Simpson, Knight, & Dansereau, 2004) and tailoring programming accordingly. Assessments used to measure offender mentality need to be sensitive enough to detect Criminal Values and

Cold-Heartedness tendencies, as measured in this research by the CJ-CEST. Further, periodic assessments throughout treatment are needed to gauge short-term changes and renew levels of commitment to substance abuse treatment (Simpson & Joe, 2004).

Consistent with previous findings, (Brady et al., 1993; Peters et al., 1997; Taylor, 1996), the current study revealed that females have poorer psychosocial functioning than males. In light of these findings, it seems reasonable to assume that female offenders need programs that are based on female psychology and the interrelationship of substance abuse, mental health and trauma (Covington & Bloom, 2000). The present Psychosocial findings additionally suggest that Blacks report higher levels of psychosocial functioning than Whites and Hispanics. Again, specific programming may be needed to address race-specific concerns in this area.

Regarding Response to Treatment, the current results suggest that males view their treatment more positively. This is not surprising in light of the fact that historically the development of United States correctional facilities has been directed by male legislators for male correctional agents whose main goal was to contain and control the country's male prison population (Van Wormer, 2001). As recent as 1997, most prison treatment programs and aftercare which were originally developed for males and based on male needs have been used for female offenders (Henderson 1998; Leukefeld, Tims, & Farabee, 2002; Peters et al., 1997). However, studies of treatment in other settings (i.e., community treatment) often find the reverse pattern with females reporting higher treatment engagement (Joe, Broome, Rowan-Szal, & Simpson (2002). Whether the findings of the current study reveal something unique regarding female prison-based treatment or not will warrant further research. Nevertheless, the need for gender-specific

substance abuse treatments that addresses both drug abuse and victimization for incarcerated females has been advocated by numerous authors based on research findings which identify differential needs between male and female inmates (Henderson, 1998; Pelissier, 2004; Peters et al., 1997; Prendergast, Wellisch, & Falkin, 1995; Zlotnick, Najavits, Rohsenow, & Johnson, 2003). Overall, the female programming of recent years has improved but remains inadequate in terms of prison availability, transition upon leaving prison and gender-specificity in both (Henderson, 1998).

The Criminal Values composite, Cold Heartedness scale, and Psychosocial composite were all significant predictors of perceptions of treatment. An examination of the interactions indicated that there were no differences in the prediction profiles for males and females. However, Criminal Values is more important in predicting treatment response for Whites and Hispanics than for Blacks, whereas Cold Heartedness better predicts response to treatment for Blacks and Hispanics than for Whites. The Psychosocial composite was a good predictor of response to treatment for all three racial groups. The significant overall predictions suggest that all three composites are of potential value in tailoring treatment programming. The interactions with race suggest the potential of making detailed modifications based on race.

In summary, the present study replicated and extended previous findings on Criminal Thinking, Psychosocial functioning, and perceptions of treatment for individuals differing in gender and race. However, several limitations should be noted for this research. First, the data were collected by self-report. The honesty with which the responses were given can only be assumed. Second, data collection took place at two south-central Texas IPTC substance abuse treatment programs. It is unknown whether or

not the findings can be generalized to other programs across the country. Third, ratings of treatment may have been influenced by the differing strengths and weaknesses of each facility potentially creating a facility effect confounded with gender. Additionally, there may be the potential of a facility/race confounding. Fourth, data were collected cross-sectionally and does not represent changes over time for individual offenders. Future research with the CJ-CEST aimed at implementing it as a part of a regular and continual assessment throughout treatment is needed.

Overall findings for the present study indicated that Psychosocial functioning and Cold Heartedness ratings were as expected with females having less psychosocial functioning and males having greater amounts of Cold Heartedness. Yet the Criminal Values and Response to Treatment results were not as expected in that no gender differences existed for Criminal Values and males responded more favorably to treatment than the females. Further, racial groupings played a part in the ratings of Criminal Values and Psychosocial functioning, but not in Cold Heartedness. Specifically, an examination of Criminal Values suggested Blacks and Hispanics had higher levels than Whites, yet Whites and Hispanics had poorer psychosocial functioning than Blacks. In the prediction of Response to Treatment, all three scales (Criminal Values, Cold Heartedness, and Psychosocial functioning) were significant predictions but neither gender nor race was significant for the overall model. However, significant prediction interactions were found by race for Criminal Values and Cold Heartedness. In particular, Criminal Values is more important in predicting treatment response for Whites and Hispanics than for Blacks, whereas Cold Heartedness better predicts response to treatment for Blacks and Hispanics than for Whites. These findings imply that

programming should focus on utilizing the results from the CJ-CEST to enhance or modify current treatment services in order to increase offender participation and retention, thereby improving the likelihood of successful treatment outcomes.

In conclusion, the results from this research support the usefulness of the CJ-CEST in examining gender and race differences, and predicting response to treatment. Future efforts should pursue a more in-depth understanding of the relationship that gender and race play in criminal thinking, psychosocial functioning, and treatment effectiveness for substance-abusing offenders.

Appendix

FOR ADMINISTRATIVE PURPOSES

TCU/CJ CEST Survey for Correctional Populations

Please follow along as the interviewer reads each of the following statements aloud. The statements are about how you see yourself or your treatment in this facility. Indicate how strongly you AGREE or DISAGREE with the statement by filling in the appropriate circle. If you strongly disagree with the statement, fill in the circle under the "Disagree Strongly" column. If you disagree with the statement, but don't feel strongly about it, fill in the circle under the "Disagree" column. If you don't know whether you agree or disagree with the statement, fill in the circle below the "Undecided" column. If you agree with the statement, but don't feel very strongly about it, fill in the circle below the "Agree" column. If you agree with the statement and feel strongly about it, fill in the circle under the "Agree Strongly" column. Please mark only one circle for each statement.

The examples below show how to mark the circles --

For example -- ●

	Disagree Strongly (1)	*Disagree (2)*	*Uncertain (3)*	*Agree (4)*	*Agree Strongly (5)*
Person 1. I like chocolate ice cream.	○	●	○	○	○
This person disagrees a little so she probably doesn't like chocolate ice cream.					
Person 2. I like chocolate ice cream.	○	○	○	○	●
This person likes chocolate ice cream a lot.					
Person 3. I like chocolate ice cream.	○	○	●	○	○
This person is not sure if he likes chocolate ice cream or not.					

TCU FORMS/CJ CEST (9/03)

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

TCU/CJ CEST Survey– Part I

PLEASE RESPOND TO EACH OF THE STATEMENTS BELOW BY FILLING IN THE CIRCLE TO INDICATE HOW MUCH YOU AGREE OR DISAGREE WITH EACH ONE. MARK ONLY ONE CHOICE FOR EACH STATEMENT.
THANK YOU FOR YOUR PARTICIPATION.

Today's Date: |__|__||__|__||__|__|
MO DAY YR

	Disagree Strongly *(1)*	Disagree *(2)*	Uncertain *(3)*	Agree *(4)*	Agree Strongly *(5)*
1. You have people close to you who motivate and encourage your recovery.	○	○	○	○	○
2. You trust your counselor.	○	○	○	○	○
3. You need help in dealing with your drug use.	○	○	○	○	○
4. Your religious beliefs are very important in your life.	○	○	○	○	○
5. You have little control over the things that happen to you.	○	○	○	○	○
6. You need to stay in treatment.	○	○	○	○	○
7. Time schedules for counseling sessions at this program are convenient for you.	○	○	○	○	○
8. It's always easy to follow or understand what your counselor is trying to tell you.	○	○	○	○	○
9. You only do things that feel safe.	○	○	○	○	○
10. You have family members who want you to be in treatment.	○	○	○	○	○
11. This program expects you to learn responsibility and self-discipline.	○	○	○	○	○
12. You keep the same friends for a long time.	○	○	○	○	○
13. This treatment is giving you a chance to solve your drug problems.	○	○	○	○	○

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
14. This kind of treatment program is not helping you.	O	O	O	O	O
15. Your counselor is easy to talk to.	O	O	O	O	O
16. You have trouble sleeping.	O	O	O	O	O
17. You have much to be proud of.	O	O	O	O	O
18. You have close family members who want to help you stay away from drugs.	O	O	O	O	O
19. You are willing to talk about your feelings during counseling.	O	O	O	O	O
20. This program is organized and run well.	O	O	O	O	O
21. You are motivated and encouraged by your counselor.	O	O	O	O	O
22. You feel people are important to you.	O	O	O	O	O
23. What happens to you in the future mostly depends on you.	O	O	O	O	O
24. You need more help with your emotional troubles.	O	O	O	O	O
25. You are concerned about legal problems.	O	O	O	O	O
26. You have made progress with your drug/alcohol problems.	O	O	O	O	O
27. You have good friends who do not use drugs.	O	O	O	O	O
28. You have carried weapons, like knives or guns.	O	O	O	O	O
29. You have people close to you who can always be trusted.	O	O	O	O	O
30. You are satisfied with this program.	O	O	O	O	O
31. You have learned to analyze and plan ways to solve your problems.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
32. It is urgent that you find help immediately for your drug use.	O	O	O	O	O
33. There is little you can do to change many of the important things in your life.	O	O	O	O	O
34. You have trouble following rules and laws.	O	O	O	O	O
35. You have made progress toward your treatment program goals.	O	O	O	O	O
36. You feel a lot of anger inside you.	O	O	O	O	O
37. You always attend the counseling sessions scheduled for you.	O	O	O	O	O
38. Your counselor recognizes the progress you make in treatment.	O	O	O	O	O
39. You will give up your friends and hangouts to solve your drug problems.	O	O	O	O	O
40. Taking care of your family is very important.	O	O	O	O	O
41. You have a hot temper.	O	O	O	O	O
42. Your counselor is well organized and prepared for each counseling session.	O	O	O	O	O
43. Your counselor is sensitive to your situation and problems.	O	O	O	O	O
44. You feel a lot of pressure to be in treatment.	O	O	O	O	O
45. There is really no way you can solve some of the problems you have.	O	O	O	O	O
46. You like others to feel afraid of you.	O	O	O	O	O
47. You need more individual counseling sessions.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
48. You consider how your actions will affect others.	○	○	○	○	○
49. You could be sent to jail or prison if you are not in treatment.	○	○	○	○	○
50. Your counselor makes you feel foolish or ashamed.	○	○	○	○	○
51. You feel mistreated by other people.	○	○	○	○	○
52. Your counselor views your problems and situations realistically.	○	○	○	○	○
53. You plan ahead.	○	○	○	○	○
54. This treatment program gives you hope for recovery.	○	○	○	○	○
55. You need more educational or vocational training services.	○	○	○	○	○
56. You want to be in drug treatment.	○	○	○	○	○
57. You feel interested in life.	○	○	○	○	○
58. Other clients at this program care about you and your problems.	○	○	○	○	○
59. You feel like a failure.	○	○	○	○	○
60. You have trouble concentrating or remembering things.	○	○	○	○	○
61. You avoid anything dangerous.	○	○	○	○	○
62. You have stopped or greatly reduced your drug use while in this program.	○	○	○	○	○
63. Your counselor helps you develop confidence in yourself.	○	○	○	○	○
64. You have people close to you who understand your situation and problems.	○	○	○	○	○

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
65. Your life has gone out of control.	O	O	O	O	O
66. You always participate actively in your counseling sessions.	O	O	O	O	O
67. You have made progress in understanding your feelings and behavior.	O	O	O	O	O
68. You need more group counseling sessions.	O	O	O	O	O
69. You feel afraid of certain things, like elevators, crowds, or going out alone.	O	O	O	O	O
70. You feel anxious or nervous.	O	O	O	O	O
71. You wish you had more respect for yourself.	O	O	O	O	O
72. Other clients at this program are helpful to you.	O	O	O	O	O
73. You are very careful and cautious.	O	O	O	O	O
74. You feel sad or depressed.	O	O	O	O	O
75. You think about probable results of your actions.	O	O	O	O	O
76. You feel extra tired or run down.	O	O	O	O	O
77. You have improved your relations with other people because of this treatment.	O	O	O	O	O
78. You have trouble sitting still for long.	O	O	O	O	O
79. You think about what causes your current problems.	O	O	O	O	O
80. The staff here are efficient at doing their job.	O	O	O	O	O
81. You are similar to (or like) other clients of this program.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
82. You are ready to leave this treatment program.	O	O	O	O	O
83. You have made progress with your emotional or psychological issues.	O	O	O	O	O
84. Your counselor respects you and your opinions.	O	O	O	O	O
85. You work in situations where drug use is common.	O	O	O	O	O
86. You are tired of the problems caused by drugs.	O	O	O	O	O
87. You think of several different ways to solve a problem.	O	O	O	O	O
88. You feel you are basically no good.	O	O	O	O	O
89. You are in this treatment program only because it is required.	O	O	O	O	O
90. You worry or brood a lot.	O	O	O	O	O
91. You have people close to you who expect you to make positive changes in your life.	O	O	O	O	O
92. You get mad at other people easily.	O	O	O	O	O
93. You have trouble making decisions.	O	O	O	O	O
94. You have serious drug-related health problems.	O	O	O	O	O
95. You have people close to you who help you develop confidence in yourself.	O	O	O	O	O
96. You like to do things that are strange or exciting.	O	O	O	O	O
97. You have thoughts of committing suicide.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

		Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
98.	You make good decisions.	O	O	O	O	O
99.	You have developed positive trusting friendships while in this program.	O	O	O	O	O
100.	In general, you are satisfied with yourself.	O	O	O	O	O
101.	You feel honesty is required in every situation.	O	O	O	O	O
102.	You have urges to fight or hurt others.	O	O	O	O	O
103.	You make decisions without thinking about consequences.	O	O	O	O	O
104.	You give honest feedback during counseling.	O	O	O	O	O
105.	You feel tense or keyed-up.	O	O	O	O	O
106.	You like to take chances.	O	O	O	O	O
107.	You have people close to you who respect you and your efforts in this program.	O	O	O	O	O
108.	You can do just about anything you really set your mind to do.	O	O	O	O	O
109.	You feel you are unimportant to others.	O	O	O	O	O
110.	You can depend on your counselor's understanding.	O	O	O	O	O
111.	You like the "fast" life.	O	O	O	O	O
112.	You work hard to keep a job.	O	O	O	O	O
113.	There is a sense of family (or community) in this program.	O	O	O	O	O
114.	You feel tightness or tension in your muscles.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
115. You can get plenty of personal counseling at this program.	O	O	O	O	O
116. You want to get your life straightened out.	O	O	O	O	O
117. Sometimes you feel that you are being pushed around in life.	O	O	O	O	O
118. You need more medical care and services.	O	O	O	O	O
119. You like friends who are wild.	O	O	O	O	O
120. You often feel helpless in dealing with the problems of life.	O	O	O	O	O
121. Several people close to you have serious drug problems.	O	O	O	O	O
122. This program location is convenient for you.	O	O	O	O	O
123. You feel lonely.	O	O	O	O	O
124. You have legal problems that require you to be in treatment.	O	O	O	O	O
125. You are not ready for this kind of treatment program.	O	O	O	O	O
126. You analyze problems by looking at all the choices.	O	O	O	O	O
127. You are following your counselor's guidance.	O	O	O	O	O
128. Your treatment plan has reasonable objectives.	O	O	O	O	O
129. You depend on "things" more than "people."	O	O	O	O	O
130. Your temper gets you into fights or other trouble.	O	O	O	O	O

© Copyright 2002 TCU Institute of Behavioral Research, Fort Worth, Texas. All rights reserved.

FOR ADMINISTRATIVE PURPOSES

TCU/CJ CEST Survey– Part II

	Disagree Strongly *(1)*	Disagree *(2)*	Uncertain *(3)*	Agree *(4)*	Agree Strongly *(5)*
1. You get upset when you hear about someone who has lost everything in a natural disaster.	O	O	O	O	O
2. You deserve special consideration.	O	O	O	O	O
3. You are in prison now because you had a run of bad luck.	O	O	O	O	O
4. The real reason you are in prison is because of your race.	O	O	O	O	O
5. When people tell you what to do, you become aggressive.	O	O	O	O	O
6. Anything can be fixed in court if you have the right connections.	O	O	O	O	O
7. Seeing someone cry makes you sad.	O	O	O	O	O
8. You rationalize your irresponsible actions with statements like "Everyone else is doing it, so why shouldn't I?".	O	O	O	O	O
9. Bankers, lawyers, and politicians get away with breaking the law everyday.	O	O	O	O	O
10. You do not worry too much about hurting someone's feelings.	O	O	O	O	O
11. You have paid your dues in life and are justified in taking what you want.	O	O	O	O	O
12. When not in control of a situation, you feel the need to exert power over others.	O	O	O	O	O
13. When questioned about the motives for engaging in crime, you justify your behavior by pointing out how hard your life has been.	O	O	O	O	O

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
14. You get angry when you think about the injustices that happen in this world.	O	O	O	O	O
15. People need to know that you can take care of yourself just by looking at you.	O	O	O	O	O
16. You are sometimes so moved by an experience that you feel emotions that you cannot describe.	O	O	O	O	O
17. You argue with others over relatively trivial matters.	O	O	O	O	O
18. You need to learn better ways to control your behavior.	O	O	O	O	O
19. If someone disrespects you, then you have to straighten them out, even if you have to get physical with them to do it.	O	O	O	O	O
20. You like to be in control.	O	O	O	O	O
21. You find yourself blaming the victims of some of your crimes.	O	O	O	O	O
22. You would not have committed crimes if you had had a good job.	O	O	O	O	O
23. This country's justice system was designed to treat everyone equally.	O	O	O	O	O
24. You have been forced to do some bad things you knew were wrong.	O	O	O	O	O
25. Police do worse things than do the "criminals" they lock up.	O	O	O	O	O
26. Laws exist to protect everyone, not just a few people who have lots of money.	O	O	O	O	O
27. You think you have to pay back people who mess with you.	O	O	O	O	O
28. You like watching sports more when you see a player get hurt.	O	O	O	O	O

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
29. Nothing you do here is going to make a difference in the way you are treated.	O	O	O	O	O
30. You feel you are above the law.	O	O	O	O	O
31. It is okay to commit crime in order to pay for the things you need.	O	O	O	O	O
32. Society owes you a better life.	O	O	O	O	O
33. There is nothing worse than being seen as weak or helpless.	O	O	O	O	O
34. Breaking the law is no big deal as long as you do not physically harm someone.	O	O	O	O	O
35. You find yourself blaming society and external circumstances for the problems in your life.	O	O	O	O	O
36. You worry when a friend is having personal problems.	O	O	O	O	O
37. You feel responsible for your mistakes.	O	O	O	O	O
38. The only way to protect yourself is to be ready to fight.	O	O	O	O	O
39. You are not to blame for everything you have done.	O	O	O	O	O
40. You like to be on "center stage" in your relationships and conversations with others.	O	O	O	O	O
41. You really are not bothered by having to tell someone bad news.	O	O	O	O	O
42. It is unfair that you are imprisoned for your crimes when bank presidents, lawyers, and politicians get away with their crimes.	O	O	O	O	O

FOR ADMINISTRATIVE PURPOSES

	Disagree Strongly (1)	Disagree (2)	Uncertain (3)	Agree (4)	Agree Strongly (5)
43. You are in prison now because of the bad choices you made.	O	O	O	O	O
44. Taking from others keeps you from appearing worthless.	O	O	O	O	O
45. Laws are just a way to keep poor people down.	O	O	O	O	O
46. Your good behavior should allow you to be irresponsible sometimes.	O	O	O	O	O
47. When you size up another person, you first consider whether they look strong or weak.	O	O	O	O	O
48. Life is too short to spend time trying to control other people and situations.	O	O	O	O	O
49. It is okay to commit crime in order to live the life you deserve.	O	O	O	O	O
50. Prosecutors often tell witnesses to lie in court.	O	O	O	O	O
51. You feel you are going to die young anyway, so you do not worry much about the future.	O	O	O	O	O
52. To get along in this life, you have to trust people most of the time.	O	O	O	O	O
53. It is better to risk dying in a fight than to back down and have everyone think you are weak.	O	O	O	O	O
54. You justify the crimes you have committed by telling yourself that if you had not done it, someone else would have.	O	O	O	O	O
55. The best way to survive on the street or in prison is to be in a gang.	O	O	O	O	O
56. You may be a criminal, but your environment made you that way.	O	O	O	O	O

References

Ashley, O. S., Marsden, M. E., & Brady, T. M. (2003). Effective of substance abuse treatment programming for women: A review. *American Journal of Drug and Alcohol Abuse, 29*(1), 19-53.

Bloom, B., Lind, M., & Owen, B. (1994). *Women in California prisons: Hidden victims of the war on drugs*. San Francisco: Center of Juvenile and Criminal Justice.

Brady, K. T., Grice, D. E., Dustan, L., & Randall, C. (1993). Gender differences in substance use disorders. *American Journal of Psychiatry, 150*(11), 1707-1711.

Byqvist, S. (1999). Criminality among female drug abusers. *Journal of Psychoactive Drugs, 31*(4), 353-362.

Chatham, L. R., Hiller, M. L., Rowan-Szal, G., Joe, G. W., & Simpson, D. D. (1999). Gender differences at admission and follow-up in a sample of methadone maintenance clients. *Substance Use and Misuse, 34*(8), 1137-1165.

Covington, S. S., & Bloom, B. E. (2000, November). *Gendered justice: Programming for women in correctional settings.* Paper presented at the 52nd annual meeting of the American Society of Criminology, San Francisco.

Davis, D. R., & DiNitto, D. M. (1996). Gender differences in social and psychological development: A comparison to nonsubstance abusers. *Journal of Psychoactive Drugs, 28*(2), 135-145.

Gornik, M. (2004). Moving from correctional program to correctional strategy: Using proven practices to change criminal behavior. In K. Knight & Farabee, D. (Eds.), *Treating addicted offenders: A continuum of effective practices* (pp. 37-01 -- 37-12). Kingston, NJ: Civic Research Institute, Inc.

Greenfeld, L. A., & Snell, T. L. (1999). *Women offenders (Bureau of Justice Special Report NCJ 175688)*. Washington, DC: U.S. Department of Justice.

Henderson, D. J. (1998). Drug abuse and incarcerated women: A research review. *Journal of Substance Abuse Treatment 15*(6), 579-587.

Hser, Y., Anglin, M. D., & McGlothlin, W. (1987). Sex differences in addict careers. 1. Initiation of use. *American Journal of Drug and Alcohol Abuse, 13*(1-2), 33-57.

Inciardi, J. A., Lockwood, D., & Pottieger, A. E. (1993). *Women and crack-cocaine*. New York: McMillian Publishing Company.

Joe, G. W., Broome, K. M., Rowan-Szal, G., & Simpson, D. D. (2002). Measuring patient attributes and engagement in treatment. *Journal of Substance Abuse Treatment, 22*, 183-196.

Joe, G. W., Knezek, L., Watson, D., & Simpson, D. D. (1991). Depression and decision-making among intravenous drug users. *Psychological Reports, 68*, 339-347.

Johnson, M. E., Brems, C., & Burke, S. (2002). Recognizing comorbidity among drug users in treatment. *American Journal of Drug Alcohol Abuse, 28*(2), 243-261.

Jones, C. B., & McJetters, Y. (1999). Gender, race, and homicide: A preliminary analysis. *The Western Journal of Black Studies, 23*(2), 119-124.

Karberg, J. C., & James, D. J. (2005). *Substance dependence, abuse, and treatment of jail inmates, 2002* (Bureau of Justice Special Report NCJ 209588). Washington, DC: U.S. Department of Justice.

Kingree, J. B. (1995). Understanding gender differences in psychological functioning and treatment retention. *American Journal of Drug Alcohol Abuse, 21*(2), 267-28.

Knight, D. K., Cross, D. R., Giles-Sims, J., & Simpson, D. D. (1995). Psychosocial functioning among adult drug users: The role of parental absence, support, and conflict. *International Journal of the Addictions, 30*(10), 1271-1288.

Knight, K., Garner, B. R., Simpson, D. D., Morey, J. T., & Flynn, P. M. (2006). An assessment for criminal thinking. *Crime and Delinquency, 52(1), 159-177*.

Knight, K., Holcom, M., & Simpson, D. D. (1994). *TCU psychosocial functioning and motivation scales: Manual on psychometric properties*. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Knight, K., Simpson, D. D., & Morey, J. T. (2002). *TCU-NIC Cooperative Agreement: Final report*. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Leukefeld, C. G., Tims, F. M., & Farabee, D. (Eds.). (2002). *Treatment of drug offenders: Policies and issues*. New York: Springer Publishing Company, Inc.

Mauer, M., Potler, C., & Wolf, R. (1999). *Gender and justice: Women, drugs, and sentencing policy*. Washington, DC: The Sentencing Project.

Mumola, C. J. (1999). *Substance abuse and treatment, state and federal prisoners, 1997* (Bureau of Justice Statistics Special Report NCJ 172871). Washington, DC: U.S. Department of Justice.

Mumola, C. J., & Bonczar, T. P. (1998). *Substance abuse and treatment on adults on probation, 1995* (Bureau of Statistics Special Report NCJ 166611). Washington, DC: U.S. Department of Justice.

Neale, J. (2004). Gender and illicit drug use. *British Journal of Social Work, 34*, 851-870.

Pelissier, B. (2004). Gender differences in substance use treatment entry and retention among prisoners with substance use histories. *American Journal of Public Health, 94*(8), 1418-1424.

Pelissier, B., Rhodes, W., Saylor, W. G., Gaes, G. G., Camp, S. D., Vanyur, S. D., & Wallace, S. (2001). TRIAD drug treatment evaluation project. *Federal Probation, 64*(3), 3-7.

Peters, R. H., Strozier, A. L., Murrin, M. R., & Kearns, W. D. (1997). Treatment of substance-abusing jail inmates. *Journal of Substance Abuse Treatment, 14*(4), 339-349.

Prendergast, M. L., Wellisch, J., & Falkin, G. P. (1995). Assessment of and services for substance-abusing women offenders in community and correctional settings. *The Prison Journal, 75*(2), 240-256.

Simpson, D. D., & Joe, G. W. (1993). *Measurement of social functioning in addicts: Psychometric and validity analyses*. Fort Worth: Texas Christian University, Institute of Behavioral Research.

Simpson, D. D., & Joe, G. W. (2004). A longitudinal evaluation of treatment engagement and recovery stages. *Journal of Substance Abuse Treatment, 27*, 89-97.

Simpson, D. D., Joe, G. W., Dansereau, D. F., & Chatham, L. R. (1997). Strategies for improving methadone treatment process and outcomes. *Journal of Drug Issues, 27*(2), 239-260.

Simpson, D. D., Joe, G. W., Knight, K., Ray, S., & Watson, D. D. (1992). *Psychological and cognitive correlates of AIDS-risky behaviors* (Papers from the Second Annual NADAR Meeting, October 1990). Bethesda, MD: NOVA Research Company.

Simpson, D. D., Joe, G. W., Rowan-Szal, G., & Greener, J. M. (1995). Client engagement and change during drug abuse treatment. *Journal of Substance Abuse, 7*, 117-134.

Simpson, D. D., & Knight, K. (2001a). Texas Christian University model of treatment process and outcomes. In J. A. Gondles (Ed.), *The state of corrections* (pp. 211-222). Baltimore, MD: American Correctional Association.

Simpson, D. D., & Knight, K. (2001b). The TCU Model of Treatment Process and outcomes in correctional settings. *Offender Substance Abuse Report, 1*(4), 51-58.

Simpson, D. D., Knight, K., & Dansereau, D. F. (2004). Addiction treatment strategies for offenders. *Journal of Community Corrections*, 7-10, 27-32.

Snell, T. (1994). *Women in prison: Survey of state prison inmates* (Bureau of Statistics Special Report). Washington, DC: U.S. Department of Justice.

Snell, T. L., & Morton, D. C. (1991). *Women in prison* (Bureau of Statistics Special Report). Washington, DC: U.S. Department of Justice.

Staton, M., Leukefeld, C., & Webster, J. M. (2003). Substance use, health, and mental health: Problems and service utilization among incarcerated women. *International Journal of Offender Therapy and Comparative Criminology, 47*(2), 224-239.

Surratt, H. L. (2003). Parenting attitudes of drug-involved women inmates. *The Prison Journal,* 83(2), 206-220.

Taylor, S. (1996). Women offenders and reentry issues. *Journal of Psychoactive Drugs, 28*(1), 85-93.

Van Wormer, K. (2001). *Counseling female offenders and victims*. New York: Springer Publishing Company, Inc.

Walters, G. D. (1995a). The Psychological Inventory of Criminal Thinking Styles, Part I: Reliability and preliminary validity. *Criminal Justice and Behavior, 22*(3), 307-325.

Walters, G. D. (1995b). The Psychological Inventory of Criminal Thinking Styles, Part II: Identifying simulated response sets. *Criminal Justice and Behavior, 22*(4), 437-445.

Walters, G. D. (1996). The natural history of substance misuse in an incarcerated criminal population. *Journal of Drug Issues, 26*(4), 943-959.

Walters, G. (1998). *Changing lives of crime and drugs: Intervening with substance abusing offenders*. New York: John Wiley & Sons.

Walters, G. D. (2001). The relationship between masculinity, femininity, and criminal thinking in male and female offenders. *Sex Roles, 45*(9/10), 677-689.

Walters, G. D. (2003). Changes in criminal thinking and identity in novice and experienced inmates. *Criminal Justice and Behavior, 30*(4), 399-421.

Walters, G. D., & Geyer, M. D. (2004). Criminal thinking and identity in male white-collar offenders. *Criminal Justice and Behavior, 31*(3), 263-281.

Walters, G. D., & Geyer, M. D. (2005). Construct validity of the psychological inventory of criminal thinking styles in relationship to the PAI, disciplinary adjustment and program completion. *Journal of Personality Assessment, 84*(3), 252-260.

Young, D., Fluellen, R., & Belenko, S. (2004). Criminal recidivism in three models of mandatory drug treatment. *Journal of Substance Abuse Treatment, 27*, 313-323.

Zlotnick, C., Najavits, L. M., Rohsenow, D. J., & Johnson, D. M. (2003). A cognitive-behavioral treatment for incarcerated women with substance abuse disorder and posttraumatic stress disorder: Findings from a pilot study. *Journal of Substance Abuse Treatment, 25*, 99-105.

VITA

JANIS T. MOREY

OFFICE ADDRESS**:**

Institute of Behavioral Research
Texas Christian University
TCU Box 298740
Fort Worth, Texas 76129
(817) 257-5926
j.morey@tcu.edu

HOME ADDRESS:

6766 Wilton Drive
Fort Worth, Texas 76133

EDUCATION:

1977-1979:	Southwest Texas State University, San Marcos, TX: B.S. (Elementary Education, Guidance Studies)
1997-1998:	University of Georgia, Athens, GA: M.Ed. (Educational Psychology)
2003-------:	Texas Christian University, Fort Worth, TX

PROFESSIONAL EMPLOYMENT:

1979-1990:	Elementary Education Teacher, San Antonio, TX, Universal City, TX, and Bothell, WA
1995-1998:	Director of Educational Services and Neurofeedback Specialist, Attention Development Programs, Atlanta, GA
1998-1999:	Director and Provider of Neurofeedback Services, Everwell Physicians Consultants, PC & Healthcare Center, Atlanta, GA
1999-2001:	Brain Mapping Technician II, Department of Psychiatry, Brain Research Center, Mercer University School of Medicine, Macon, GA
2001:	Research Analyst II, Department of Psychiatry and Behavioral Sciences, Mercer University School of Medicine, Macon, GA
2001-------:	Research Associate, Institute of Behavioral Research, Texas Christian University, Fort Worth, TX

ABSTRACT

GENDER DIFFERENCES IN RATINGS OF CRIMINAL THINKING, PSYCHOSOCIAL FUNCTIONING, AND RESPONSE TO TREATMENT FOR INDIVIDUALS IN CORRECTIONAL SUBSTANCE ABUSE TREATMENT

By Janis Teresa Morey, M.Ed.
Department of Psychology
Texas Christian University

Thesis Advisor: Donald Dansereau, Professor of Psychology

Co-Thesis Advisor: Sandra Dees, Research Scientist

Kirk Broome, Research Scientist

Previous criminal justice research has shown that incarcerated substance abusing females and males of diverse racial groups differ both in the attitudes and behaviors that they bring to treatment, in addition to their specific treatment needs. Utilizing the Texas Christian University (TCU) *Criminal Justice Client Evaluation of Self and Treatment* (CJ-CEST), this study addresses the questions of gender differences on mean responses to Criminal Thinking, Psychosocial functioning, and Response to Treatment scales; gender differences with respect to the degree to which Criminal Thinking and Psychosocial scales predict responses to substance abuse treatment; and gender and racial interactions to gain a larger perspective of how these variables influence one another. The study sample was derived from two Texas Department of Criminal Justice facilities, one male (N = 396) and one female (N = 555). Outcomes for Psychosocial functioning and Cold Heartedness ratings were as expected with females having less psychosocial functioning and males having higher levels of Cold Heartedness. Yet the Criminal Values and Response to Treatment results were not as expected in that no gender

differences existed for Criminal Values and males responded more favorably to treatment than females. Racial groupings influenced the ratings of Criminal Values and Psychosocial functioning with Blacks and Hispanics having higher levels of Criminal Values than Whites, while Whites and Hispanics had poorer psychosocial functioning than Blacks. In the prediction of Response to Treatment, Criminal Values, Cold Heartedness, and Psychosocial functioning were significant predictions but neither gender nor race was significant for the overall model. However, significant interactions were found by race for Criminal Values and Cold Heartedness. Criminal Values was more important in predicting treatment response for Whites and Hispanics than for Blacks, whereas Cold Heartedness was a better predictor for Blacks and Hispanics than for Whites. Implications for programming are also discussed.