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Examining the Relationship between Procedural Justice and Recidivism in a Jail-Based Residential Substance Abuse Treatment Program

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EXAMINING THE RELATIONSHIP BETWEEN PROCEDURAL JUSTICE AND
RECIDIVISM IN A JAIL-BASED RESIDENTIAL SUBSTANCE ABUSE TREATMENT
PROGRAM

By

CHRISTIAN B. DANE

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree
of
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of
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ACCEPTANCE

This thesis was prepared under the direction of the candidate's Thesis Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Master of Science in Criminal Justice in the Andrew Young School of Policy Studies of Georgia State University.

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October 2012

DEDICATION

I would like to dedicate my Master's Thesis to my family. To my mother and father for always supporting my academic and career endeavors, as they have changed many times. To my younger brother, whose lighthearted attitude is always a welcome distraction from the stresses of the real world. And to an entire family who has always emphasized the importance of continuing education as each family member has been an inspiration to me. Thank you all for your love and support. I love all of you dearly.

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ABSTRACT

CHRISTIAN B. DANE
Examining the Relationship between Procedural Justice and Recidivism in a Jail-Based
Residential Substance Abuse Treatment Program
(Under the direction of DR. LISA MUFTIC)

Research has found support for the effectiveness of procedural justice, specifically perceived

fairness, in gaining compliance from people with respect to the police and the courts (Sunshine

& Tyler, 2003; Tyler, 1984; Tyler, 2001). Further, research has examined the effectiveness in

jail-based residential substance abuse treatment (RSAT) programs in reducing recidivism for

offenders with substance abuse problems (Bahr, Harris, Strobell, & Taylor, 2012; Eisenberg &

Fabelo, 1996; Hiller, Knight, & Simpson, 1999). However, research has yet to test whether

procedural justice can impact recidivism for offenders with substance abuse problems and

multiple incarcerations. The major focus of this Master's thesis was to examine whether 78

participants in the 90-day jail-based RSAT program known as Starting Treatment and Recovery

Today (START) were less likely to be rearrested after release from jail if they felt they were

treated fairly by the jail staff. Bivariate analyses were conducted on survey data and official

criminal records. The findings suggest that perceived fairness of the jail staff was not related to

post-program recidivism. Moreover, the results indicate that offenders with more extensive

criminal histories were more likely to recidivate. Recommendations for future research and the

implications of the findings are discussed.

CHAPTER ONE

Introduction

A major issue affecting countries around the world is the increase in the number of people incarcerated in jails and prisons over the past two decades (Lynch & Pridemore, 2011). Despite decreases in the United States (U.S.) jail population since 2008, there were still 147, 000 more individuals incarcerated in 2010 than there were in 2000 (Glaze, 2011; Minton, 2012). Moreover, between 1999 and 2008 the incarceration rate in the U.S. saw a 12% increase, while Sweden, the United Kingdom, and Japan incurred increases of 20%, 23%, and 48%, respectively (Lynch & Pridemore, 2011). However, the U.S. leads all other western nations in the number of citizens incarcerated per capita.

Offender recidivism is a contributing factor to the growing prison population. For instance, in a study of fifteen states, Langan and Levin (2002) found that over two-thirds of all prisoners released in 1994 were rearrested, reconvicted, or reincarcerated within three years of release from prison. In 2009, over 7.2 million people were under correctional supervision, which includes those in prisons and jails as well as on probation and parole (Glaze, 2010). This figure represents approximately 3.1% of the adult resident population in the nation.

One reason for the increasing number of individuals under correctional supervision may be extenuating circumstances that increase a person's propensity of offending. Research has shown that drug-involved offenders are at an especially high risk of recidivating (Gendreau, Little, & Goggin, 1996; Langan & Levin, 2002). Furthermore, numerous prisoners, probationers, and parolees have many psychological problems, including substance use and abuse (Karberg & James, 2005) and mental illness (Teplin, 1994), and histories of physical and

emotional trauma (Hiller, Knight, Rao, & Simpson, 2002). For example, in 2002 more than two-thirds of jail inmates were either dependent on or abusive of drugs or alcohol (James & Glaze, 2006). Moreover, according to the Arrestee Drug Abuse Monitoring Program II (ADAM II) 2010 Annual Report (2011) which monitors drug use among male arrestees booked into jails in ten large U.S. cities during a 14-day study period reported that those who tested positive for drugs were more likely to have been arrested before the current arrest than those who tested negative for drugs. In addition to drug problems, Teplin (1994) found that almost two-thirds of 728 males in Chicago's jail had a mental illness and another one-third was characterized as having a severe mental illness.

Generally, the only way many offenders with a substance abuse history receive treatment for such use is while they are incarcerated. Treatment is usually in the form of education classes in in-prison therapeutic communities (TCs), which provide an intensive and extremely structured social environment for those that have substance abuse and addiction problems (Welsh, 2007). The main component of this treatment modality is the use of the therapeutic community in order to create change in attitudes, behaviors, and perceptions related to drug use. Additionally, in TCs, treatment of offenders involves interaction with professional treatment staff that consists of therapists, counselors, and others in formal and informal settings in order to help offenders understand their problems and how to counteract the negativity with which it is associated.

As mentioned previously, many inmates have drug and alcohol problems. This, combined with the large and increasing correctional population, has led the criminal justice system, along with practitioners and providers, to develop as part of rehabilitation programs additional interventions addressing addiction/use/abuse. Correctional-based treatment dates back to the 1930s, while TCs, described above, were created in the 1960s. Addressing substance

abuse of offenders during incarceration became a focus of corrections authorities in the 1990s. For example, in 1991, Texas Governor Ann Richards sponsored and supported legislation for the substantial expansion of residential substance abuse treatment (RSAT) programs, perhaps the most prominent type of correctional-based treatment (Eisenberg & Fabelo, 1996). Moreover, 25,000 new prison beds were created, 14,000 of which were dedicated to substance abuse treatment, with 2,000 beds used for in-prison TCs (Eisenberg & Fabelo, 1996). This is just one example of the many RSAT programs that were created around the nation to help reduce the substance use and abuse problems plaguing drug-involved offenders.

Residential substance abuse treatment programs are aimed at helping offenders address and overcome their drug problems while they are in prison. These treatment programs attempt to address problems by changing the way participants think and behave through very structured and specific programming on a daily basis. In particular, the use of in-prison therapeutic communities and drug treatment programs has been shown to ameliorate rearrest and reincarceration among drug-involved offenders (Bahr, Harris, Strobell, & Taylor, 2012; Eisenberg & Fabelo, 1996; Field, 1989; Hiller, Knight, & Simpson, 1999; Inciardi, Martin, & Butzin, 2004; Knight, Simpson, & Hiller, 1999; Prendergast, Hall, Wexler, Melnick, & Cao, 2004; Wexler, Melnick, Lowe, & Peters, 1999).

The RSAT programs that are most effective are those that involve principles of quality intervention, solid structure, therapy, and aftercare (Field, 1985; Welsh, 2007). For example, in a study examining the Cornerstone Program held in Salem, Oregon, Field (1985) found that there were seven treatment principles that made the program successful. They include 1) separating inmates from the general population, 2) clearly understood rules and consequences, 3) a systematically managed process for earning freedom a little at a time, 4) formal participation by

inmates in running the program, 5) intensive treatment, 6) treating addiction and criminality, and 7) transition and aftercare.

According to the National Center on Addiction and Substance Abuse (CASA) at Columbia University (2010), intensive treatment is described as having individualized treatment plans tailored to the unique needs of the offender, as well as closely monitoring substance use and relapses that are followed by immediate rewards and sanctions. Many of these principles are found in the KEY/CREST program, Kyle New Vision, and Amity prison TC, which are discussed in more detail later. Further, effective RSAT programs that incorporate an interorganizational strategy, which means that different agencies cooperate with one another. The interorganizational approach between treatment staff, jail staff, and other authorities has been found to create a more successful treatment environment for offenders (Taxman & Bouffard, 2000). The collaboration among different organizations, combined with the aforementioned treatment principles, allow for RSAT programs to be more successful when treating offenders with a substance abuse history in a prison environment.

One aspect of RSAT programs not yet examines is its attention to procedural justice. , Procedural justice stems from the social psychology field and has been applied to various areas within criminal justice recently (Paternoster et al., 1997). Procedural justice is described as the way legal authorities (e.g., judges, police) treat people with whom they encounter and the fairness of procedures employed to reach legal decisions for individuals (Tyler, 2001). Procedural justice is rooted in a process-based regulation model incorporating motive-based trust and legitimacy, discussed in further detail later (Sunshine & Tyler, 2003). It has been shown that people evaluate legal authorities such as the police and the courts based on how these legal entities treat people and whether they use fair procedures (Tyler, 2001). While originally

examined with respect to civil justice processes, procedural justice has garnered much support for its use in the criminal justice system (Paternoster, Brame, Bachman, & Sherman, 1997; Tyler, 2001; Tyler & Huo, 2002). The application of these findings to RSAT programs could result in improvements in the implementation of in-prison TC treatment and RSAT programs and potentially better treatment outcomes.

Research has yet to address what effects incorporation of aspects of procedural justice may have on program completion and recidivism for RSAT – mandated offenders. Because of its success in other criminal justice areas, it is possible that if the judge, program and jail staff, and other criminal justice employees treat offenders fairly during the sentencing and treatment program of offenders, then they may be more likely to complete their treatment program and less likely to recidivate.

The current study will examine whether criminal recidivism will differ among participants enrolled in a 90-day jail based RSAT program known as START, the acronym for Starting Treatment and Recovery Today based upon their perception of fair treatment from criminal justice system agents, such as the judge, program staff, and jail staff. It is expected that START participants who report being treated fairly will have lower recidivism than participants who do not perceive fair treatment from these criminal justice system agents. It is hypothesized that if offenders perceive the RSAT program as fair, they will be less likely to recidivate than offenders who do not perceive the RSAT program as fair. In order to test this hypothesis, quantitative data collected from an in-jail RSAT program comprised of 126 offenders with a substance abuse history will be used.

CHAPTER TWO

Review of the Literature

Examining ways to improve the effectiveness of residential substance abuse treatment (RSAT) programs and in-prison therapeutic communities (TCs) is important because offenders with a substance abuse history have a higher likelihood of returning to the criminal justice system than non-drug involved offenders (Eisenberg & Fabelo, 1996; Field, 1989; Hiller et al., 1999; Inciardi et al., 2004; Knight et al., 1999; Prendergast et al., 2004; Wexler et al., 1999). Implementing procedural justice principles into the sentencing of offenders with a substance abuse history and throughout the treatment program may help to increase completion rates and reduce recidivism, thereby helping to lower the number of people under the supervision of the criminal justice system. Decreasing the number of rearrests and subsequent incarcerations will also reduce the amount of money spent by taxpayers on jails, prisons, probation, and parole. This study examines the potential effects of procedural justice relative to criminal recidivism for offenders with a substance abuse history participating in the Starting Treatment and Recovery Today (START) program, a 90-day jail-based RSAT program, thus filling a gap in the literature.

The literature review will encompass three parts. First, the literature review will delve into the work that has evaluated RSAT programs and how effective they are at reducing recidivism. Specific focus will be given to program elements that are shown to impact RSAT completion rates and reductions in recidivism. Second, the literature review will focus on the existing body of research that has been conducted pertaining to procedural justice (primarily as it relates to policing and courts). Third, the theoretical connection between procedural justice and completion of sentence and recidivism will be addressed.

Residential Substance Abuse Treatment Programs and Recidivism

Residential substance abuse treatment programs have been used in prisons for over three decades. The KEY/CREST program in Delaware, the Amity program in California, and the Kyle New Vision therapeutic community in Texas are three successful RSAT and aftercare programs that have been observed and studied at great length. These programs have produced positive results and provided a model of implementing an in-prison TC program.

The KEY/CREST program in the Delaware correctional system has been in place since the mid-1990s. It follows a multistage approach, which involves an in-prison TC setting, and then a transitional work-release phase followed by aftercare and has been researched thoroughly (Inciardi et al., 2004). Treatment is intensive and lasts approximately 18 months between the first two stages in addition to ongoing aftercare. Results from a study examining five-year outcomes of offenders released from prison revealed that those who completed the treatment with or without aftercare were significantly less likely of being rearrested or having a drug relapse than those who did not participate in treatment (Inciardi et al., 2004). The treatment and no treatment group only differed significantly on one variable; the treatment group reported significantly more drug involvement than the no treatment group. Furthermore, Inciardi et al. (2004) found that the most positive outcomes (e.g. remaining drug free and arrest free) were exhibited in those who finished treatment and attended aftercare. Specific factors that contributed to the success of the program included close monitoring by correctional staff and constant testing for drugs (Lockwood, Inciardi, & Surratt, 1997).

Research has been conducted on the Amity program at the R.J. Donovan Correctional Facility in San Diego, which is a 200-bed unit that also incorporates a multistage model that includes three phases (Prendergast et al., 2004; Wexler et al., 1999). The first phase (lasting two

to three months) revolves around clinical observation and assessment of residents' needs and problem areas as well as assimilating them into the TC culture quickly. The second phase (lasting five to six months) involves an increase in the responsibility placed on the inmates, where education, encounter groups, and counseling sessions are focused on self-discipline, self-worth, and acceptance of guidance for problems. During the third phase (one to three months long), clients prepare for community reentry and enhance their decision making and planning skills. The in-prison treatment lasts from anywhere between 8 and 12 months and then optional aftercare is offered in an Amity-operated facility for up to one year. This community TC houses up to 40 residents. Research on the Amity program reveals that offenders who received treatment recidivated less than offenders who did not three and five years later with aftercare completers recidivating significantly less than all other groups (Prendergast et al., 2004; Wexler et al., 1999). This evidence shows the importance of not only in-prison therapeutic communities, but also extending treatment into aftercare. Moreover, Pendergrast et al. (2004) found in their study of five-year outcomes that age, as well as length of time in treatment, despite whether it was completed, were positively associated to delaying reincarceration.

The third model program that has been studied extensively is the Kyle New Vision in-prison therapeutic community (Eisenberg & Fabelo, 1996; Hiller et al., 1999; Knight et al., 1999). The program lasts for nine months while in prison followed by 1 to 3 months of TC aftercare and then 3 to 12 months of outpatient counseling. In addition to aftercare mandates, graduates must meet with their parole officer and give a urine sample routinely, usually once per month. They must also meet with a case manager occasionally to review progress and discuss any problems. Similar to the studies examining the Amity program, those looking at the Kyle New Vision TC demonstrated that recidivism, defined as rearrest or reincarceration, was

significantly reduced for offenders who completed treatment in addition to completing aftercare (Hiller et al., 1999; Knight et al., 1999) and prolonged the length of time until rearrest (Hiller et al., 1999). Eisenberg and Fabelo (1996) found that simply completing the in-prison treatment was sufficient to reduce the likelihood of being rearrested or incarcerated after one year. This finding, contrary to the findings of studies examining more long-term outcomes (Inciardi et al., 2004; Prendergast et al., 2004), indicates that the in-prison treatment itself yields short-term positive results; however, in order to produce more long-term results, aftercare may be an important part of the treatment process. Additionally, those completing treatment had significantly higher employment rates than those dropping out of treatment and those in the comparison group (Eisenberg & Fabelo, 1996).

In sum, constructive RSAT programs, in which effectiveness is indicated by reduced criminal recidivism and drug use, are those that deliver intensive treatment for several months, are able to retain clients throughout the entire treatment program, and include an aftercare program. Overall, effective RSAT programs have several common programmatic features. For example, they have clearly defined goals and objectives for the different phases of their respective model. Additionally, treatment staff and correctional staff closely monitor the program participants, who submit to routine urine tests. These programs tend to focus the content of the education on self-discipline, self-worth, and other cognitive-behavioral facets in an effort to modify the way offenders with substance abuse histories think in a positive manner. The effectiveness of all three of the aforementioned programs was compromised if patients did not complete treatment, leading to drug relapse, rearrest, and/or reincarceration. Further, for positive long-term results (i.e. more than one year), aftercare looks to be a key component, whereas the

treatment program may be adequate for reduced recidivism for the short-term (i.e. less than one year).

Effectiveness of In-prison Therapeutic Communities

Prison-based therapeutic communities have been shown to be more successful in reducing recidivism when recidivism is defined as being rearrested or re-incarcerated as opposed to having a drug relapse. For example, there is evidence that suggests that those who graduate from a treatment program will be less likely to be rearrested, convicted, or to serve prison time than dropouts and comparison groups (Field, 1989; Hiller, Knight, & Simpson, 2006). However, Welsh (2007), who evaluated five prison-based TCs, found that while rearrest and reincarceration were reduced, drug relapse was virtually unaffected. Research indicates that it is likely that obligatory aftercare provides a greater impact on reducing drug relapse than criminal recidivism, whereas in-prison TC treatment is sufficient to reduce rearrest and reincarceration (Welsh, 2007).

Other factors may also be related to the effectiveness of RSAT programs. In addition to programmatic features, it is often debated what is the appropriate length for follow-up monitoring of behavior to capture the treatment effects.. Studies show that as time passes, the probability of recidivating after completing treatment increases (Incidari et al., 2004; Prendergast et al., 2004; Wexler et al., 1999). These findings are comparable to research in other areas that suggest that there can be at least short-term effects of treatment when it comes to changing the way people think, which is one of the aims of RSAT and TC programs, while longer term behavior changes may wane. .

In addition to length of treatment effects, motivation for treatment must be discussed when examining RSAT programs. Engagement in treatment was most prevalent in those

offenders who expressed a desire for help and readiness for treatment (Hiller, Knight, Leukefeld, & Simpson, 2002). Common measures for "desire for help" include asking individuals to rate their endorsements of statements such as "You need help in dealing with your drug use" and "It is urgent that you find help immediately for your drug use" while "treatment readiness" items include statements such as "This treatment program can really help you" and "This treatment program seems too demanding for you" using 5- or 7- point Likert-type scales that indicate a respondents' level of agreement with each statement (Hiller et al., 2002; Staton-Tindall et al., 2007). Moreover, drug abusers who are not adequately motivated to change, or who are not ready for treatment, are at a higher risk for dropping out of treatment early (De Leon, Melnick, & Kressel, 1997; De Leon, Melnick, Thomas, Kressel, & Wexler, 2000). Treatment engagement is considered a key factor in predicting the success of treatment and those individuals who are more motivated and committed to the program are more likely to be engaged in treatment.

Another factor to consider is demographics such as age and sex differences of program participants. For instance, Fickenscher, Novins, and Beals (2006) found, in a study of American Indian adolescents between the ages of 13 and 18, that older adolescents (16-18) were more likely to complete treatment than younger adolescents (13-15). Further, a study of veterans admitted to an RSAT program revealed that veterans who successfully completed the program were two years older on average than those who failed to complete (Stack, Cortina, Samples, Zapata, & Arcand, 2000). Similarly, Hiller et al. (2002) found that older offenders showed more personal progress and trust in peers and program staff members in their examination of a RSAT program. Overall, research indicates that older clients participating in a RSAT program are more likely to complete and be engaged in treatment than younger clients (Fickenscher et al., 2006; Hiller et al., 2002; Stack et al., 2000).

Additionally, sex is a relevant demographic characteristic that warrants attention. For example, women reported that they felt more trust with group members and the program staff than did men (Hiller et al., 2002; Staton-Tindall et al., 2007). Females express more anxiety and depression than do males, both of which are negatively associated with treatment engagement. However, men score higher on cold-heartedness than do women, an indication of criminal thinking, which is concomitant to lower treatment engagement (Staton-Tindall et al., 2007; Arfken, Klein, di Menza, & Schuster, 2000). Relatedly, a drug court evaluation conducted by Gray and Saum (2005) found that women were more likely to complete drug court successfully than were men. On the other hand, Arfken et al. (2000) found that the 30-day retention rates and treatment completion rates of women were significantly lower than those of men. However, the authors also reported that the women had a significantly higher number of severe drug-related problems at assessment than did the men. The majority of research supports the notion that women are more motivated for treatment and more likely to complete treatment than are men (Hiller et al., 2002; Gray & Saum, 2005; Staton-Tindall et al., 2007).

Program factors and characteristics should be considered when examining RSAT programs as well as those that directly affect operations such as assessment and treatment. (Taxman & Bouffard, 2000). Programmatic factors such as goals for treatment, client supervision, and treatment delivery are all essential features. One issue related to these factors is program consistency as it relates to the transition from the in-prison TC to aftercare, which has been brought into question. These programs tend to have considerable difficulty in transitioning their participants into aftercare because of the varying methodologies utilized by each (Eisenberg & Fabelo, 1996; Taxman & Bouffard, 2000). This lack of consistency can have detrimental effects for clients with respect to treatment because treatment is not being administered in a

similar manner from one stage to the next. Likewise, programs that maintain high rates

offenders transferring out of the program, released early, or left the program for other jail

programs indicate that the treatment staff and correctional staff did not agree on the selection

criteria appropriate for the program (Taxman & Bouffard, 2000). Moreover, Taxman and

Bouffard found that weak programs, especially relative to females, have cognitive behavioral

interventions that are unstructured, delivered inconsistently, and did not address recovery and

criminal thinking. Taxman and Bouffard (2000) put forth the notion of employing a "systems

approach" which allows for a "seamless system of care among treatment and criminal justice

agencies" (p. 52). This will allow these agencies to better collaborate, which will improve client

selection and treatment modalities.

In sum, three successful RSAT program have been discussed in detail: the KEY/CREST

program, the Amity program, and the Kyle New Vision therapeutic community. These programs

incorporate the therapeutic community within a prison setting, which provides the structure and

intense treatment necessitated by the drug-involved offenders they are to rehabilitate.

Additionally, successful RSAT programs should employ a multistage approach, in which

treatment intensity varies from stage to stage and include aftercare, which extends treatment

beyond the prison. RSAT programs, to better serve their clients, should maintain a consistent

approach with regard to administering treatment and assessing client needs as well as involve

quality collaboration among treatment staff, jail staff, and other criminal justice officials. RSAT

programs will benefit from having clients who are motivated and committed to treatment

because these individuals are likely to be engaged in treatment, which is an essential factor to

program completion. Finally, evaluations of RSAT programs should take programmatic factors

into consideration (i.e. client motivation, appropriate client assessment, consistent treatment

delivery). Attention will now turn to procedural justice and the potential connection it has with reducing recidivism in a RSAT program setting.

Procedural Justice

Research on procedural justice has generally been studied in the field of social psychology (Tyler, 1984; Tyler, 2001; Tyler, 2003; Tyler & Huo, 2002). Generally, people make two judgments, outcome-based and process-based, about the fairness and quality of their experiences with authorities (Thibault & Walker, 1978). Both are psychological in nature in that they are based on people's perceptions. Process-based judgment, also known as procedural justice, refers to a person's approval of the method by which a decision-maker arrived at an outcome, not the outcome itself. Procedural justice works with a component known as motive-based trust to produce a process-based regulation model (Tyler & Huo, 2002). According to Tyler and Huo (2002) motive-based trust refers to a person's internal, unobservable traits, which are inferred by others, based on that individual's observable actions. In other words, motive-based trust is people's willingness to accept decisions of legal authorities, provided they trust said authorities and believe that decisions are reached fairly. It is the combination of procedural justice and motive-based trust that leads to deference and compliance with legal authorities such as the police and courts. Furthermore, it is that trust that develops legitimacy in an institution and it is argued that legitimacy leads to cooperation (Hough, Jackson, Bradford, Myhill, & Quinton, 2010; Sunshine & Tyler, 2003). Legitimacy can be defined as a quality maintained by an institution of authority that leads people to believe that that body is entitled to be complied with and obeyed (Sunshine & Tyler, 2003). When people feel that the law has treated them fairly and respectfully, regardless of the outcome, and that they trust the motives of the people in

positions of authority, they will be more likely to defer and comply with these institutions (Tyler & Huo, 2002).

Within the criminal justice system, procedural justice is based on a process-based regulation model in which the police and courts employ strategies to obtain the trust and cooperation of the public through fair procedures and respectful treatment of people (Tyler & Huo, 2002). People base their evaluations of the effectiveness of legal authorities not simply on whether they believe they are successful in carrying out their missions, such as apprehending criminals and putting them in prison, but on how well the authorities treat people (Tyler, 2001; Tyler, 2003). Further, it is not the outcome of the decisions made by legal authorities as much as it is the fairness with which the decisions are reached that influences how people feel about legal authorities (Tyler, 2001). In other words, if an individual is given an unfavorable outcome but believes that the decision was reached fairly by the legal institution and perceives respect, then the individual is more likely to accept the decision and maintain respect and compliance with that authority.

An authoritative body is seen as legitimate mainly because of the procedural fairness it maintains towards the people it serves (Sunshine & Tyler, 2003). Simply put, procedural justice is the primary component in shaping legitimacy for an institution. This holds true for the police (Hough et al., 2010; Sunshine & Tyler, 2003; Tyler, 2001; Tyler, 2003), the courts (Tyler, 2001; Tyler, 2003), prisons (Sparks, Bottoms, & Hay, 1996) and mediation (Pruitt, Peirce, McGillicuddy, Welton, & Castrianno, 1993). Cherney and Murphy (2011) have pointed out that while an institution in-and-of-itself can be viewed as having legitimate authority, the legitimacy of rules and regulations being enforced can be called into question. However, the majority of the aforementioned studies support that fair procedures and appropriate treatment of people by legal

authorities leads to the legitimacy that cultivates deference and compliance of the public over time. The next section will address how procedural justice is measured and tested.

Measuring procedural justice

The most common way of measuring elements of procedural justice has been using survey instruments that examine individuals' perceptions of procedural justice on a Likert-type scale (Lin, 2000; Sunshine & Tyler, 2003; Tankebe, 2009; Tyler, 1984). Studying perceptions of procedural fairness are important because not everyone will view the same procedures used by authoritative entities, such as the police and courts, as being fair (Lin, 2000; Paternoster et al., 1997; Sunshine & Tyler, 2003; Tankebe, 2009; Tyler, 1984; Tyler, 2001). A scale developed by Sunshine and Tyler (2003), which has been used in multiple studies examining procedural justice, contains 19 items that tap into two key dimensions of procedural fairness: the quality of decision-making and the quality of treatment (Sunshine & Tyler, 2003; Tankebe, 2009). These items may be answered using a six-point Likert-type scale that ranges from "almost always" to "almost never." Other surveys may inquire how "fair" or "just" they felt the procedures utilized were by the authoritative body in question to reach a research participant's outcome with four-point Likert scales ranging from "very unfair" to "very fair" (Lin, 2000) or "very just" to "very unjust" (Tyler, 1984).

Much of the research on procedural justice within the criminal justice system has been conducted with regard to studying the courts and the police (Lin, 2000; Paternoster et al., 1997; Tyler, 2001; Tyler & Huo, 2002). With respect to the police and courts, deference and compliance are most likely to occur when individuals feel that the decisions of the police and courts are reached fairly, even when the decisions may not be favorable decisions (Lin, 2000; Paternoster et al., 1997; Tyler, 2001, Tyler, 2003). For example, Tyler (2001) found that of

those who had personal experiences with the police and the courts, quality of treatment and the perception of fair procedures had the strongest influence on people's judgments about both of the entities. Specifically illustrating this point, Lin's (2000) research indicated that fathers who felt that their child support orders were fair were more likely to comply with them than those who felt their orders were unfair.

In addition to compliance, people are more likely to evaluate the courts and law enforcement more positively when they feel that the police and judges are treating the community with respect and reaching decisions fairly (Tyler, 2001). Although it is generally thought that the public bases their evaluations of the police based on crime control (i.e. lowering the crime rate, arresting more offenders), evidence shows that this is only partially the case (Tyler, 2001; Tyler 2003). The majority of the public's evaluations of the police and courts are the result of the fair procedures used to exercise the authority of these legal entities (Tyler, 2001, Tyler, 2003). People base their evaluations, not just on their personal experiences, where favorability of outcome may be slightly more important, but on the experiences of others. Research indicates that people will make judgments about legal authorities based on how legal authorities treat other people and whether the public feels that decisions were reached in a procedurally fair comportment (Tyler, 2001).

Additionally, procedural justice is equally effective for individuals regardless of age, race, sex or outcome offense type where the outcome can become more or less favorable (i.e. a felony conviction typically leads to more severe consequences than less serious offenses) (Casper, Tyler, & Fisher, 1988; Paternoster et al., 1997). Case in point, Tankebe (2009) found that although citizens of Ghana put more emphasis on police performance than American citizens, procedural justice was still important in promoting cooperation with, and commitment

to, the law. The evidence indicates that principles of procedural justice are applicable to various and diverse populations.

Motive-based trust, another key factor that plays into this process-based regulation model, is studied extensively in psychology (Tyler & Huo, 2002). When deferring to the police, trusting law enforcement officers is important. For instance, if the police respond to a burglary, take a report, but never find the missing items, then the person has to decide whether the police did everything they could to resolve the crime. If the person does feel that the police did everything in their power, then the individual will be more likely to trust the police in the future, should another burglary take place, even though the missing items were not recovered (Tyler & Huo, 2002). As long as legal authorities act in good faith and have the right intentions, then the capacity for them to make mistakes is somewhat greater. Trust in authorities is an important component when it comes to deferring to and complying with legal authorities (Tyler, 2003; Tyler & Huo, 2002).

Procedural justice research has also focused on defendants currently dealing with the criminal justice system. Tyler (1984) examined the attitudes of traffic violators and other petty offenders toward authorities. He found that the perceived fairness of courts was the most influential factor related to attitudes of offenders toward judges and the courts. Although the outcome played a role in explaining attitudes towards the courts, procedural fairness was found to play the biggest role in determining attitudes. Moreover, Allen (1985) found that probationers felt that when their probation officer treated them with respect, they rated their overall probation experience more positively and believed that probation was more effective. These findings seem to be similar with regard to felony cases (Casper et al., 1988). Although the "stakes" may be higher in felony cases where the outcome could lead to very poor attitudes because there is more

for felony offenders to lose in terms of more time incarcerated, evidence shows that procedural

fairness is almost as important as the outcome itself relative to attitudes towards the courts

(Casper et al., 1988). These findings indicate the significance of incorporating procedural justice

ideals with offenders while they are being dealt with by the criminal justice system. Offenders

who perceive the criminal justice system to be fair and respectful are more likely regard the

system positively than those who do not to accept and comply with the decisions made by

authorities.

In addition to perceived fairness and respectful treatment, research indicates that agency

of offenders is an important element to procedural justice (Allen & Treger, 1990). Agency, in

this sense, is defined as offenders giving input and making decisions that affect the program in

which they are enrolled. For example, Allen and Treger (1990) found that community service

orders could be improved by involving offenders in the process of program evaluation, thus

furthering the engagement of these participants in the community service program. Agency in

this regard has relevance for RSAT programs. A key component of successful RSAT programs

is that of putting responsibility on the clients to take ownership of their treatment and cooperate

with the treatment staff to continue to tailor the program to their specific needs.

Perhaps the greatest advantage of legal authorities employing procedural justice

principles, those of fairness and respect, is that such principles lead to citizen compliance over

time (Tyler, 2003). When the authorities act in a manner that is procedurally fair, the legitimacy

of the authorities increases. This is because as people perceive fair treatment, their feelings of

responsibility to obey the law increase (Tyler, 2003). This is further amplified when people feel

that they can trust legal authorities. When the public feels that the intentions of the police and

courts are good, they are more likely to trust them and evaluate them more positively. Moreover,

when offenders are allowed to give their input to improve aspects of the criminal justice system, they are more likely to perceive the system more positively (Allen, 1985).

There is evidence that demonstrates the effectiveness of procedural justice, specifically with respect to the police and the courts. It has also had a positive impact for other authoritative institutions such as prisons and mediation. Because of its success in these areas of authority, it is worth examining whether procedural justice applies to other criminal justice based programs such as RSATs. For example, are program participants' perceptions of procedural justice related to RSAT completion rates? Furthermore, are these perceptions related to recidivism?

Link between Procedural Justice and Sentence Completion and Recidivism

Procedural justice, to some degree, has shown to be effective in reducing recidivism and may possibly relate to offenders completing a given sentence. For example, when police arrested assault suspects in domestic violence disputes in a procedurally fair manner, the rate of subsequent assault was lower than when the police officers did not act in this way (Paternoster et al., 1997). Furthermore, those suspects that were arrested but perceived they had received fair treatment had equal rates of recidivism compared to those who received more favorable outcomes, such as being warned but not arrested.

Moreover, offenders may perceive unfair treatment based on the procedure used to determine their sentences. For example, an experiment was conducted in Switzerland that examined the comparative effects of community service and prison sentences of up to 14 days. Findings show that upon learning that random assignment was the way in which they were sentenced to prison or given a community service order, those sentenced to prison felt that this procedure was unfair (Killias, Aebi, & Ribeaud, 2000). The imprisoned offenders felt they were treated unfairly by the sentencing judge significantly more than those sentenced to community

service, but no significant differences were found between the two groups with respect to perceived fairness by the police or criminal justice system. Additionally, incarcerated offenders were more likely to report that they may recidivate in the future than those assigned to community service (Killias et al., 2000).

The link between procedural justice and RSAT completion and recidivism has yet to be researched. Because procedural justice is evidenced to have been successful in other areas of the criminal justice system such as the police, courts, and prisons, it is possible that building in attention to these principles can be beneficial for RSAT programs as well. Additionally, if reducing criminal recidivism is the ultimate goal, and if treating drug-involved offenders mandated to participate in RSAT programs fairly and respectfully could potentially advance this goal, then studying the impact of procedural justice is a worthwhile endeavor.

CHAPTER THREE

Methods

Introduction

The purpose of this study is to examine the relationship between procedural justice and criminal recidivism for drug involved offenders participating in a jail-based residential substance abuse treatment (RSAT) program known as Starting Treatment and Recovery Today (START). This study employed a quantitative research design, in which 126 offenders sentenced to START and incarcerated in the DeKalb County Jail in Decatur, Georgia participated in one of three cohorts between July 2011 and June 2012. Approval for this study was granted from the Institutional Review Board at Georgia State University for research to be conducted with human participants between July, 2011 and June, 2012 (IRB H12043). A purposive method of sampling was used. It was hypothesized that START program participants who perceived they had been treated fairly by the jail staff would be less likely to recidivate upon completion of the START program and release from jail. Survey data was utilized to address this hypothesis. A description of the setting, sample, data collection procedures and instruments, and measures will now be provided.

Setting

This study took place in the DeKalb County Jail, located in Decatur, Georgia, just outside of Atlanta. The DeKalb County Jail is one of the largest correctional facilities in the southeastern United States. During the 2011 calendar year, the jail processed for admission 42,579 inmates, of which a little more than 77% were male. Almost 80% of the inmates were black, 11% were white, 8% were Hispanic, and just over 1% comprised a combination of Asian, Indian, other, and unknown. The average age of the jail population was 32.58; with a little more

than 2% being under 18, 30% were between the ages of 18 and 25, 41% were between 26 and 39, and 26% were over 40 years of age.

The START Participant survey instrument (to be discussed in further detail later) was administered to three separate cohorts towards the end of the 90-day treatment program. The survey was administered at the jail to male participants in a large meeting room within a pod. The survey instrument was administered to female participants in a small meeting room separate from the pods. The male and female inmates sat in chairs that were set up in the shape of a circle in their respective rooms while completing the survey. Only the research team was present during the administration of the survey.

Sample/Participants

The sampling procedure used for this study was purposive sampling. Purposive sampling is employed when examining a specific group of individuals that meet certain criteria, in this case those offenders participating in the START program. The target population for this program was offenders serving their third or subsequent incarceration who had a history of substance abuse. Because this study examined a specific RSAT program (START), only those that were enrolled in the START program were eligible for participation in the study. Participants of this research study included three separate cohorts. Cohort one began with 43 participants receiving treatment from July 7, 2011 to October 5, 2011. There were two individuals from the first cohort who chose not to take the survey and one was released from the program early. Cohort two began with 41 participants receiving treatment from November 7, 2011 to February 8, 2012. There were two individuals in the second cohort not present for the survey for unknown reasons. Cohort three began with 41 participants receiving treatment from

March 5, 2012 to June 1, 2012. There was one individual from the third cohort who chose not to participate in the survey and two who were released from the program early.

Overall, a total of 125 individuals participated in the START program and 122 (97.6%) of those successfully completed the program. As a whole, the majority (88.0%) of the participants in the study was non-white (e.g., black, Hispanic), male (76.8%), in their late thirties (M=38.14 (SD= 10.53; range 18-62), and unemployed (46.2%). In terms of family status, the majority was single (68.9%), while a large percentage (79.0%) also had children.

Similarities and differences were found between the sample and the total jail population for 2011. For example, both groups were approximately the same with regard to sex (sample = 76.8% male; population = 77.3% male) and race (sample = 88.0% non-White; population = 89.2% non- White). However, regarding age, the sample (M = 38.14) was older than the population (M = 32.58).

Table 3.1

Comparative Demographics

Variable	Sample (N=125)	Jail Population (N=42,579)[a]
Age in years	38.14	32.58
Sex		
Male	76.8%	77.3%
Female	23.2%	22.7%
Race		
White	12.0%	10.8%
Non-white	88.0%	89.2%

a. Jail population based on every individual that was in DeKalb County Jail during 2011.

Differences were found between the cohorts. For instance, the mean age for Cohort 1 was 38.15 (10.40) ranging from 18 to 57. The mean age for Cohort 2 was 40.12 (10.19) ranging from 21 to 58. Lastly, the mean age for Cohort 3 was 36.00 (10.88) ranging from 20 to 62. All

three cohorts were comprised mostly of participants that were male (Cohort 1 = 72.5%; Cohort 2 = 75.6%; Cohort 3 = 84.2%), non-White (Cohort 1 = 80.0%; Cohort 2 = 90.2%; Cohort 3 = 89.2%), unemployed (Cohort 1 = 72.5%; Cohort 2 = 53.7%; Cohort 3 = 60.5%), single (Cohort 1 = 65.0%; Cohort 2 = 68.3%; Cohort 3 = 73.7%), and have children (Cohort 1 = 72.5%; Cohort 2 = 87.8%; Cohort 3 = 76.3%). Education among the cohorts varied somewhat with Cohort 1 having the highest mean number of years of education with 12.44 (SD = 1.45), Cohort 3 was next with a mean of 12.21 (SD =1.91), and Cohort 2 had the lowest mean, which was 11.73 (SD = 2.72).

Table 3.2

Demographic Comparison of START Participants across All Cohorts (N=119)

Variable	Cohort 1 (N=40)	Cohort 2 (N=41)	Cohort 3 (N=38)
Age in years (SD)	38.15 (10.40)	40.12 (10.19)	36.00 (10.88)
Sex			
Male	72.5%	75.6%	84.2%
Female	27.5%	24.4%	15.8%
Race			
White	20.0%	9.8%	10.8%
Non-White	80.0%	90.2%	89.2%
Education in years (SD)	12.44(1.45)	11.73(2.72)	12.21(1.91)
Employed			
Yes	27.5%	46.3%	60.5%
No	72.5%	53.7%	39.5%
Marital Status			
Single	65%	68.3%	73.7%
Married	7.5%	22.0%	7.9%
Separated/Divorced	27.5%	9.7%	18.5%
Have children	72.5%	87.8%	76.3%

Data Collection/Procedures

Data for this study were collected via three formats. First, surveys were administered to START participants and included the START Participant Survey which was developed for program evaluation purposes, the Texas Christian University Criminal Justice Client Evaluation of Self and Treatment Survey (TCU CJ CEST; TCU Institute of Behavioral Research, 2005), and the Texas Christian University Drug Screen II (TCU Drug Screen II; TCU Institute of Behavioral Research, 2007). The START Participant survey and the TCU CJ CEST were administered together by the researchers to three separate cohorts at the end of their 90-day RSAT program in the DeKalb County Jail. Because males and females are not housed together in the jail, the surveys were completed by the males first and then completed by females, both in their respective meeting rooms. It took approximately one hour for the participants to complete the survey. The participants were given the option of having each item read aloud by a researcher or reading the items to themselves. Only the female participants in the first cohort chose to read the survey themselves; all of the males and the females in the second and third cohorts chose to have the survey read by the research team. The TCU Drug Screen II was administered to participants by treatment staff on the first day the START program commenced.

Second, the research team collected official criminal records on all START participants, which were supplied by the DeKalb County Jail staff. These records came from the Georgia Crime Information Center (GCIC) and included information pertaining to arrests, charges, and dispositions. Criminal recidivism checks were conducted at 3, 6, and 12-month intervals and hardcopies were made by DeKalb County Jail staff and sent to the researchers for analysis.

Third, program data was supplied by the START program staff, which included

participant demographic information. Program data included the following demographic

variables: age, race, sex, employment history, marital status, number of children, and education.

Measurement Instruments

There were three survey instruments utilized for this study. The START Participant

Survey was used to measure treatment need and overall client satisfaction with the START

program and was administered at the end of the treatment program. More specifically, questions

examined the services received and perceptions of satisfaction with program staff, program

services, and the restorative justice process as a whole. Additionally, questions examined

different aspects of perceived fairness related to procedural justice. The respondents were able

to answer the perceived fairness questions by responding "yes" or "no." The survey instrument

included a seven-page instrument known as the Texas Christian University Criminal Justice

Client Evaluation of Self and Treatment Survey (TCU CJ CEST; TCU Institute of Behavioral

Research, 2005), which records offender ratings of the counselor, therapeutic groups, and the

program in general. It also assesses psychological adjustment, social functioning, and

motivation. The TCU CJ CEST includes 115 statements, in which the participants are asked to

mark whether they "Disagree strongly," "Disagree," are "Uncertain," "Agree," or "Agree

strongly." These statements comprise 15 scales that measure treatment needs/motivation

("desire for help" scale, "treatment readiness" scale, "treatment needs" index, and "pressures for

treatment" index), psychological functioning ("self-esteem" scale, "depression" scale, "anxiety"

scale, and "decision making" scale), social functioning ("hostility" scale and "risk taking" scale),

and treatment progress ("treatment participation" scale, "treatment satisfaction" scale,

"counseling rapport" scale, "peer support" scale, and "social support" scale).

Another instrument utilized was the Texas Christian University Drug Screen II (TCU Drug Screen II; TCU Institute of Behavioral Research, 2007). This tool is a one-page questionnaire that serves to identify quickly individuals with a history of heavy drug use or dependency. Items on this instrument inquire about how severe the drug problem is, the type of drug that caused the most serious problem, and what drugs are used and how often they are used.

Measures

Dependent Variable

The current study examines criminal recidivism for offenders completing the START program as the dependent variable of interest. Recidivism at three and six months for cohorts one and two will be examined. Recidivism data for the third cohort was unavailable for analysis due to the timing of their program completion. This dichotomous variable is defined as any rearrest (yes/no) after successfully completing the START program and being released from jail.

Independent Variable

This study explores the potential relationship between whether START clients felt they were treated fairly by jail staff, the independent variable of interest, and criminal recidivism. Survey participants were presented with the following question designed to tap into perceived fairness: "Did you feel you were treated fairly by the jail staff?" Respondents answered "Yes=1" if they felt they were treated fairly or "No=0" if they did not feel they were treated fairly. Of the 112 participants that responded to this question, 56% answered that the jail staff did not treat them fairly and 44% answered that the jail staff treated them fairly.

Risk Factors

This study examines several risk factors that have been identified in the literature as related to recidivism. These risk factors include criminal history, drug score, drug of choice, motivation for treatment, CJ CEST scales, and TCU Criminal Thinking Scales (CTS).

Criminal History. The first risk factor to be analyzed is criminal history. Previous studies have found that offenders with a substance abuse history are more likely to return to the criminal justice system than those offenders without a history of drug use (Eisenberg & Fabelo, 1996; Field, 1989; Hiller et al., 1999; Inciardi et al., 2004; Knight et al., 1999; Prendergast et al., 2004; Wexler et al., 1999). Number of prior arrests was utilized to produce a criminal history index based on official records. This index was created in a spreadsheet with information such as number of charges per arrest, court dispositions, and sentencing dispositions pertaining to each arrest. All of this information was attained by the DeKalb County Jail.

Drug Score. The next risk factor to be investigated is the TCU Drug Screen II drug score. Research has shown that those who were returned to custody had a slightly higher mean drug screen score than those who were not returned (Knight, Simpson, & Morey, 2002). This variable is based on nine questions from the TCU Drug Screen II that inquire about drug using behavior in the previous 12 months. A score of three or higher indicates a serious drug problem. For the entire sample that completed a TCU Drug Screen II (N = 124), 77.4% had a drug score three or higher, indicating a serious drug problem. The remaining 22.6% had a drug score of below three. For Cohort 1 (N = 43), 65.1% of the participants had a drug score of at least three, while 34.9% had a drug score below three. For Cohort 2 (N = 41), 82.9% of the participants had a drug score of three or higher, while 17.1% had a drug score below three. For Cohort 3 (N =

40), 85.0% of the participants had a drug score of three or higher, while 15.0% had a drug score

below three.

Table 3.3

TCU Drug Screen II Score

Drug Score (0 - 9)	**Cohort 1 (N = 43)**	**Cohort 2 (N = 41)**	**Cohort 3 (N = 40)**
Summed Score ≥ 3	65.1%	82.9%	85.0%
Summed Score < 3	34.9%	17.1%	15.0%

*A score of greater than or equal to three indicates serious drug problem based on behavior during last 12 months.

  Drug of Choice. The third risk factor to be examined is drug of choice. Evidence has

indicated that using certain types of drugs may be related to higher rates of dropping out of

treatment early (Hiller, Knight, & Simpson, 1999) which, as previously discussed, is associated

with a greater likelihood of recidivism. This variable is based on the question from the TCU

Drug Screen II that asks "Which drug caused the most serious problem?" Respondents are to

choose one of the 14 choices. The possible choices are as follows: None; Alcohol;

Marijuana/Hashish; Hallucinogens/LSD/PCP/Psychedelics/Mushrooms; Inhalants;

Crack/Freebase; Heroin and Cocaine (mixed together as Speedball); Cocaine (by itself); Heroin

(by itself); Street Methadone (non-prescription); Other Opiates/Opium/Morphine/Demerol;

Methamphetamines; Amphetamines (other uppers); Tranquilizers/Barbituates/Sedatives/

(downers).

  The drug most frequently reported as causing the most serious problem for the entire

sample was crack/freebase (25.0%). The second highest was alcohol (14.5%), with cocaine

(9.7%), marijuana/hashish (8.9%), and methamphetamines (2.4%), third, fourth, and fifth,

respectively. For inhalants, heroin and cocaine (mixed together as Speedball), heroin (by itself),

street methadone, and other opiates, the frequencies for each were 0.8%. Lastly, 12.9% of the

sample reported that no drug caused the most serious problem, while 22.6% of the participants did not respond.

There were some similarities and differences among the three cohorts in terms of their drug of choice. For example, crack/freebase was the most commonly reported drug of choice for cohort 1 (34.9%) and cohort 2 (26.8%), while it was the second most common for cohort 3 (12.5%). Cohort 1 (18.6%) had the most respondents report that no drug caused the most serious problem, cohort 3 (12.5%) was second, with cohort 2 (7.3%) having the fewest report that no drug caused the most serious problem. All three cohorts showed missing data for this variable as well. Cohort 3 (30.0%) had the highest missing total, while cohort 2 (19.5%) was next, and cohort 1 (18.6%) had the fewest missing responses for this item. Likely, the reason for the relatively high rates of missing and responses of none are is that the START program staff did not ensure that the participants were completing the TCU Drug Screen II appropriately. Table 3.4 shows the differences among cohorts in terms of drug of choice.

Table 3.4

Differences among Cohorts for Drug of Choice

Drug of Choice	Cohort 1 (N = 43)	Cohort 2 (N = 41)	Cohort 3 (N = 40)
Alcohol	14.0%	12.2%	17.5%
Marijuana/Hashish	7.0%	14.6%	5.0%
Crack/Freebase	34.9%	26.8%	12.5%
Cocaine (by itself)	4.7%	14.6%	10.0%
Methamphetamines	0.0%	0.0%	7.5%
None	18.6%	7.3%	12.5%
Missing	18.6%	19.5%	30.0%

Motivation for Treatment. The next risk factor studied was motivation for treatment. As discussed in the literature review, the motivation of participants for treatment is a key element in whether treatment will be successful (De Leon et al., 1997; De Leon et al., 2000; Hiller et al., 2002; Staton-Tindall et al., 2007). This variable is based on two questions from the TCU Drug Screen II. The questions are "How serious do you think your drug problems are?" and "How important is it for you to get drug treatment now?" For both of these questions the respondents may answer "not at all" (coded as 0); "slightly" (coded as 1); "moderately" (coded as 2); "considerably" (coded as 3); or "extremely" (coded as 4).

Overall, on average, the entire sample (N = 120) felt that the seriousness of their drug problem was moderate to considerable (M=2.35, SD=1.35, range 0-4). As for the importance of receiving drug treatment now, participants responded, on average, that it was considerably important (M=2.96, SD=1.41, range 0-4).

There were noteworthy distinctions between the three cohorts related to their motivation for treatment. For example, cohort 1 (M=2.24, SD=1.55, range 0-4) and cohort 3 (M=2.21, SD=1.28, range 0-4) had lower scores than cohort 2 (M=2.59, SD=1.20, range 0-4) when responding to how serious they thought their drug problems were. Likewise, when responding to how important it is to get drug treatment now, cohort 2 (M= 3.22, SD= 1.13, range 0-4) scored the highest, while cohort 1 (M= 2.66, SD= 1.64, range 0-4) scored the lowest, and the responses of cohort 3 (M=3.00, SD=1.38, range 0-4) were in between cohorts 1 and 2.

Table 3.5

Differences among Cohorts for Treatment Motivation

Item	Cohort 1 (N = 41) Mean (SD)	Cohort 2 (N = 41) Mean (SD)	Cohort 3 (N = 38) Mean (SD)
How serious do you think your drug problems are?	2.24 (1.55)	2.59 (1.20)	2.21 (1.28)
How important is it for you to get drug treatment now?	2.66 (1.64)	3.22 (1.13)	3.00 (1.38)

CJ CEST Scales. The last risk factor analyzed was based on the scores on the TCU CJ CEST scales. Evidence shows that the CJ CEST is a helpful tool in predicting post-treatment outcomes (Simpson, 2004). The CJ CEST consists of 115 statements that make up 15 different scales (Only 11 of the 15 are examined for this thesis). Respondents indicate their agreement with each item by a five-point Likert Scale, where five equals "Strongly Agree," four equals "Agree," three equals "Uncertain," two equals "Disagree," and one equals "Strongly Disagree." Higher values indicate a greater agreement with each question. For each scale, the overall scale value is computed by averaging responses across items.

Desire for help. As depicted in Table 3.6, the "desire for help" scale consists of six items (M=3.96, SD=0.65, range 1-5). Higher values indicate a greater desire for help. The Chronbach alpha for this scale is 0.650 indicating an acceptable degree of internal consistency.

Table 3.6

Desire for Help (N=119)

Item	Mean	SD
You need help in dealing with your drug use.	3.84	1.25
It is urgent that you find help immediately for your drug use.	3.50	1.32
You will give up your friends and hangouts to solve your drug problems.	4.27	0.84
Your life has gone out of control.	2.95	1.44
You are tired of the problem caused by drugs.	4.45	0.85
You want to get your life straightened out.	4.69	0.48
Desire for Help (Cronbach alpha = 0.650)	**3.96**	**0.65**

Treatment readiness. As depicted in Table 3.7, the "treatment readiness" scale consists of eight items (M=3.71, SD=0.56, range 1-5). Higher values indicate a higher degree of readiness for treatment. The Chronbach alpha for this scale is 0.698 indicating an acceptable degree of internal consistency.

Table 3.7

Treatment Readiness (N=119)

Item	Mean	SD
You need to stay in treatment.	3.37	1.33
This treatment is giving you a chance to solve your drug problems.	4.40	0.70
This kind of treatment program is not helping you.	4.50	0.81
This treatment program gives you hope for recovery.	4.45	0.55
You want to be in drug treatment.	3.54	1.27
You are ready to leave this treatment program.	1.73	0.85
You are in this treatment program only because it is required.	3.39	1.35
You are not ready for this kind of treatment program.	4.30	0.75
Treatment Readiness (Cronbach alpha = 0.698)	**3.71**	**0.56**

Treatment needs. As depicted in Table 3.8, the "treatment needs" scale consists of five

items (M=3.35, SD=0.94, range 1-5). Higher values indicate a greater need for treatment. The

Chronbach alpha for this scale is 0.782 indicating an acceptable degree of internal consistency.

Table 3.8

Treatment Needs (N=119)

Item	Mean	SD
You need more help with your emotional troubles.	3.33	1.27
You need more individual counseling sessions.	3.22	1.30
You need more educational or vocational training services.	3.67	1.17
You need more group counseling sessions.	3.35	1.25
You need more medical care and services.	3.15	1.40
Treatment Needs (Cronbach alpha = 0.782)	**3.35**	**0.94**

Decision making. As depicted in Table 3.9, the "decision making" scale consists of nine items (M=3.85, SD=0.56, range 1-5). Higher values indicate better decision making. The Chronbach alpha for this scale is 0.752 indicating an acceptable degree of internal consistency.

Table 3.9

Decision Making (N=119)

Item	Mean	SD
You consider how your actions will affect others.	3.88	0.95
You plan ahead.	4.02	0.82
You think about probable results of your actions.	3.90	0.70
You think about what causes your current problems.	4.09	0.79
You think of several different ways to solve a problem.	4.17	0.78
You have trouble making decisions.	3.72	1.13
You make good decisions.	3.59	0.98
You make decisions without thinking about consequences.	2.53	1.29
You analyze problems by looking at all the choices.	3.78	1.02
Decision Making (Cronbach alpha = 0.752)	**3.85**	**0.56**

Hostility. As depicted in Table 3.10, the "hostility" scale consists of eight items (M=2.28, SD=0.82, range 1-5). Higher values indicate more hostility. The Chronbach alpha for this scale is 0.846 indicating a good degree of internal consistency.

Table 3.10

Hostility (N=119)

Item	Mean	SD
You have carried weapons, like knives or guns.	3.03	1.47
You feel a lot of anger inside you.	2.21	1.26
You have a hot temper.	2.53	1.29
You like others to feel afraid of you.	1.70	0.81
You feel mistreated by other people.	2.09	0.97
You get mad at other people easily.	2.49	1.18
You have urges to fight or hurt others.	1.79	1.05
Your temper gets you into fights or other trouble.	2.31	1.29
Hostility (Cronbach alpha = 0.846)	**2.28**	**0.82**

Risk taking. As depicted in Table 3.11, the "risk taking" scale consists of seven items (M=2.77, SD=0.69, range 1-5). Higher values indicate more risk taking behavior. The Chronbach alpha for this scale is 0.705 indicating an acceptable degree of internal consistency.

Table 3.11

Risk Taking Scale (N=119)

Item	Mean	SD
You only do things that feel safe.	2.95	1.11
You avoid anything dangerous.	2.63	1.18
You are very careful and cautious.	2.19	0.94
You like to do things that are strange or exciting.	3.39	1.15
You like to take chances.	2.90	1.18
You like the "fast" life.	3.04	1.30
You like friends who are wild.	2.20	1.13
Risk Taking (Cronbach alpha = 0.705)	**2.77**	**0.69**

Treatment participation. As depicted in Table 3.12, the "treatment participation" scale consists of 12 items (M=4.29, SD=0.49, range 1-5). Higher values indicate greater participation in treatment. The Chronbach alpha for this scale is 0.882 indicating a good degree of internal consistency.

Table 3.12

Treatment Participation Scale (N=119)

Item	Mean	SD
You are willing to talk about your feelings during counseling.	4.29	0.65
You have made progress with your drug/alcohol problems.	4.32	0.69
You have learned to analyze and plan ways to solve your problems.	4.43	0.66
You have made progress toward your treatment program goals.	4.41	0.65
You always attend the counseling sessions scheduled for you.	4.31	0.81
You have stopped or greatly reduced your drug use while in this program.	4.58	0.64
You always participate actively in your counseling sessions.	4.13	0.90
You have made progress in understanding your feelings and behavior.	4.37	0.68
You have improved your relations with other people because of this treatment.	4.09	0.84
You have made progress with your emotional or psychological issues.	4.19	0.83
You give honest feedback during counseling.	4.22	0.74
You are following your counselor's guidance.	4.21	0.73
Treatment Participation (Cronbach alpha = 0.882)	**4.29**	**0.49**

Treatment satisfaction. As depicted in Table 3.13, the "treatment satisfaction" scale consists of seven items (M=3.84, SD=0.63, range 1-5). Higher values indicate more satisfaction with treatment. The Chronbach alpha for this scale is 0.702 indicating an acceptable degree of internal consistency.

Table 3.13

Treatment Satisfaction Scale (N=119)

Item	Mean	SD
Time schedules for counseling sessions at this program are convenient for you.	3.84	0.95
This program expects you to learn responsibility and self-discipline.	4.51	0.69
This program is organized and run well.	4.00	0.98
You are satisfied with this program.	4.38	0.75
The staff here are efficient at doing their job.	3.56	1.17
You can get plenty of personal counseling at this program.	3.41	1.19
This program location is convenient for you.	3.25	1.46
Treatment Satisfaction (Cronbach alpha = 0.702)	**3.84**	**0.63**

Counseling Rapport. As depicted in Table 3.14, the "counseling rapport" scale consists of 13 items (M=4.17, SD=0.52, range 1-5). Higher values indicate a greater rapport with one's counselor. The Chronbach alpha for this scale is 0.889 indicating an acceptable degree of internal consistency.

Table 3.14

Counseling Rapport Scale (N=119)

Item	Mean	SD
You trust your counselor.	4.26	0.79
It is always easy to follow or understand what your counselor is trying to tell you.	4.01	0.89
Your counselor is easy to talk to.	4.35	0.72
You are motivated and encouraged by your counselor.	4.33	0.67
Your counselor recognizes the progress you make in treatment.	4.02	0.82
Your counselor is well organized and prepared for each counseling session.	4.32	0.74
Your counselor is sensitive to your situation and problems.	3.94	0.95
Your counselor makes you feel foolish or ashamed.	4.28	0.79
Your counselor views your problems and situations realistically.	4.09	0.78
Your counselor helps you develop confidence in yourself.	4.28	0.78
Your counselor respects you and your opinions.	4.28	0.69
You can depend on your counselor's understanding.	4.10	0.84
Your treatment plan has reasonable objectives.	4.06	0.84
Counseling Rapport (Cronbach alpha = 0.889)	**4.17**	**0.52**

Peer support. As depicted in Table 3.15, the "peer support" scale consists of five items (M=3.73, SD=0.67, range 1-5). Higher values indicate more peer support. The Chronbach alpha for this scale is 0.738 indicating an acceptable degree of internal consistency.

Table 3.15

Peer Support (N=119)

Item	Mean	SD
Other clients at this program care about you and your problems.	3.64	1.02
Other clients at this program are helpful to you.	3.86	0.87
You are similar to (or like) other clients of this program.	3.84	0.85
You have developed positive trusting friendships while at this program.	3.58	1.04
There is a sense of family (or community) in this program.	3.77	1.00
Peer Support (Cronbach alpha = 0.738)	**3.73**	**0.67**

Social support. As depicted in Table 3.16, the "social support" scale consists of nine

items (M=4.16, SD=0.50, range 1-5). Higher values indicate more social support. The

Chronbach alpha for this scale is 0.681 indicating a questionable degree of internal consistency.

Table 3.16

Social Support (N=119)

Item	Mean	SD
You have people close to you who motivate and encourage your recovery.	4.44	0.91
You have close family members who want to help you stay away from drugs.	4.34	1.03
You have good friends who do not use drugs.	4.00	1.13
You have people close to you who can always be trusted.	4.20	0.98
You have people close to you who understand your situation and problems.	4.24	0.83
You work in situations where drug use is common.	3.12	1.33
You have people close to you who expect you to make positive changes in your life.	4.55	0.53
You have people close to you who help you develop confidence in yourself.	4.25	0.76
You have people close to you who respect you and your efforts in this program.	4.19	0.87
Social Support (Cronbach alpha = 0.681)	**4.16**	**0.50**

Criminal Thinking Scales. The TCU Criminal Thinking Scales (CTS) consist of 37 items that make up six different scales. It is a relevant instrument because research indicates that the TCU CTS can function as a reliable criminal thinking assessment (Knight, Garner, Simpson, Morey, & Flynn, 2006). Respondents indicate their agreement with each item by a five-point Likert Scale, where five equals "Strongly Agree," four equals "Agree," three equals "Uncertain," two equals "Disagree," and one equals "Strongly Disagree." Higher values indicate a greater agreement with each question. For each scale, the overall scale value is computed by averaging responses across items.

Entitlement. As depicted in Table 3.17, the "entitlement" scale consists of seven items

(M=1.68, SD=0.53, range 1-5). Higher values indicate a greater sense of entitlement. The

Chronbach alpha for this scale is 0.721 indicating an acceptable degree of internal consistency.

Table 3.17

Entitlement Scale (N = 119)

Item	Mean	SD
You deserve special consideration.	2.09	1.07
You have paid your dues in life and are justified in taking what you want.	1.56	0.78
You feel you are above the law.	1.41	0.71
It is okay to commit crime in order to pay for the things you need.	1.59	0.84
Society owes you a better life.	1.84	1.05
Your good behavior should allow you to be irresponsible sometimes.	1.68	0.78
It is okay to commit crime in order to live the life you deserve.	1.54	0.79
Entitlement (Cronbach alpha = 0.721)	**1.68**	**0.53**

Justification. As depicted in Table 3.18, the "justification" scale consists of six items

(M=1.88, SD=0.58, range 1-5). Higher values indicate a higher degree of justifying one's

illegitimate behavior. The Chronbach alpha for this scale is 0.618 indicating a questionable

degree of internal consistency.

Table 3.18

Justification Scale (N = 119)

Item	Mean	SD
You rationalize your irresponsible actions with statements like "Everyone else is doing it, so why shouldn't I?"	1.90	1.01
When questioned about the motives for engaging in crime, you justify your behavior by pointing out how hard your life has been.	2.09	1.13
You find yourself blaming the victims of some of your crimes.	1.91	1.07
Breaking the law is no big deal as long as you do not physically harm someone.	1.56	0.81
You find yourself blaming society and external circumstances for the problems in your life.	1.99	1.01
You justify the crimes you have committed by telling yourself that if you had not done it, someone else would have.	1.83	0.89
Justification (Cronbach alpha = 0.618)	**1.88**	**0.58**

    Power orientation. As depicted in Table 3.19, the "power orientation" scale consists of seven items (M=2.41, SD=0.71, range 1-5). Higher values indicate more orientation toward power. The Chronbach alpha for this scale is 0.738 indicating an acceptable degree of internal consistency.

Table 3.19

Power Orientation Scale (N = 119)

Item	Mean	SD
When people tell you what to do, you become aggressive.	2.27	1.10
When not in control of a situation, you feel the need to exert power over others.	1.96	1.01
You argue with others over relatively trivial matters.	2.28	1.16
If someone disrespects you then you have to straighten them out, even if you have to get physical with them to do it.	2.28	1.26
You like to be in control.	3.31	1.20
You think you have to pay back people who mess with you.	2.34	1.18
The only way to protect yourself is to be ready to fight.	2.26	1.04
Power Orientation (Cronbach alpha = 0.738)	**2.41**	**0.71**

Cold heartedness. As depicted in Table 3.20, the "cold heartedness" scale consists of five items (M=2.33, SD=0.60, range 1-5). Higher values indicate a higher degree of cold heartedness. The Chronbach alpha for this scale is 0.478 indicating an unacceptable degree of internal consistency.

Table 3.20

Cold Heartedness Scale (N = 119)

Item	Mean	SD
You get upset when you hear about someone who has lost everything in a natural disaster.	2.26	1.12
Seeing someone cry makes you sad.	2.54	1.08
You are sometimes so moved by an experience that you feel emotions that you cannot describe.	2.61	1.13
You feel people are important to you.	1.91	0.97
You worry when a friend is having personal problems.	2.30	1.06
Cold Heartedness (Cronbach alpha = 0.478)	**2.33**	**0.60**

Criminal rationalization. As depicted in Table 3.21, the "criminal rationalization" scale consists of seven items (M=3.03, SD=0.73, range 1-5). Higher values indicate a greater likelihood of rationalizing criminal behavior. The Chronbach alpha for this scale is 0.622 indicating a questionable degree of internal consistency.

Table 3.21

Criminal Rationalization Scale (N = 119)

Item	Mean	SD
Anything can be fixed in court if you have the right connections.	2.86	1.35
Bankers, lawyers, and politicians get away with breaking the law every day.	3.41	1.21
This country's justice system was designed to treat everyone equally.	3.10	1.38
Police do worse things than do the "criminals" they lock up.	3.38	1.07
It is unfair that you are imprisoned for your crimes when bank presidents, lawyers, and politicians get away with their crimes.	2.33	1.21
Prosecutors often tell witnesses to lie in court.	3.05	1.13
Criminal Rationalization (Cronbach alpha = 0.622)	**3.03**	**0.73**

Personal irresponsibility. As depicted in Table 3.22, the "personal irresponsibility" scale consists of seven items (M=2.06, SD=0.68, range 1-5). Higher values indicate more personal irresponsibility. The Chronbach alpha for this scale is 0.671 indicating a questionable degree of internal consistency.

Table 3.22

Personal Responsibility Scale (N = 119)

Item	Mean	SD
You are now in START because you had a run of bad luck.	2.07	1.28
The real reason you are in START is because of your race.	1.41	0.77
Nothing you do here is going to make a difference in the way you are treated.	2.46	1.25
You are not to blame for everything you have done.	2.45	1.22
Laws are just a way to keep poor people down.	1.97	0.94
You may be a criminal, but your environment made you that way.	2.00	1.11
Personal Irresponsibility (Cronbach alpha = 0.671)	**2.06**	**0.68**

Control Variables

This study includes multiple control variables such as age, race, sex, marital status, parental status, employment history, and self-reported treatment history.

Age. Age, reported in years, was determined by subtracting the date of birth from the date the survey was administered for each participant.

Race. Race was defined as either white (coded as 0) or non-white (coded as 1).

Sex. Sex was coded as either male (coded as 0) or female (coded as 1).

Marital Status. There were four different categories used for marital status: single (coded as 1), married (coded as 2), separated (coded as 3), and divorced (coded as 4).

Parental Status. Parental status was determined by noting whether participants had children (No=0, Yes=1). Number of children was also recorded for those participants that have them.

Employment History. Employment history was recorded as a dichotomous variable (No employment prior to sentencing=0; Yes to holding previous employment prior to sentencing=1).

Treatment History. Treatment history was recorded using the TCU Drug Screen II. Respondents were asked, "How many times before now have you ever been in a drug treatment program?" Respondents could choose one of the following five answers: "never" (coded as 0); "1 time" (coded as 1); "2 times" (coded as 2); "3 times" (coded as 3); or "4 times" (coded as 4).

Data Analysis

The data were analyzed using descriptive and bivariate inferential statistics. Statistical analysis was conducted using Statistical Package for the Social Sciences (SPSS) software in order to analyze items pertaining to procedural justice and differences between participants who recidivated and did not recidivate. The results were in the form of percentages for the researcher to determine whether fairness was perceived by the participants. Criminal recidivism was analyzed by determining whether an offender was rearrested after successful completion of the START program and release from jail.

CHAPTER FOUR

Results

Introduction

The major focus of this thesis was to determine whether a relationship exists between procedural justice and post-program recidivism in a jail-based RSAT program. The dependent variable of interest, recidivism, was defined as any rearrest immediately following graduation from the START program and subsequent release from custody. The independent variable was procedural justice. Procedural justice was operationalized by respondents answering yes or no to the following question: "Did you feel you were treated fairly by the jail staff?" It was hypothesized that START program participants who perceived fair treatment by the jail staff would be less likely to recidivate upon completion of the START program and being released from jail. As such, this chapter will present results pertaining to post-program recidivism, participants' perceptions of procedural justice within the jail-based RSAT program, and an examination of the effect procedural justice has on recidivism among individuals who participated in the RSAT program. Finally, supplemental analyses are provided that explore the influence of risk (i.e., criminal history, drug score, drug of choice, motivation for treatment, TCU CJ CEST scales, and TCU CTS) and protective (i.e., marital status, employment history, parental status, and treatment history) factors as well as control variables (i.e., age, sex, and race) on post-program recidivism.

Criminal Recidivism of Participants

The dependent variable of interest in the study was criminal recidivism following release from custody. Recidivism was operationalized as participants who were arrested after completion of START and release from jail.

Table 4.1 shows the results for the START participants who were rearrested following completion of the START program and released from jail. As previously stated, the sample contains only those from the first two cohorts who graduated due to recidivism data for the third cohort being unavailable for analysis. Of the participants who completed the START Participant Survey (N=78), 26.9% were rearrested, within six months of having been released from jail. The largest difference between the two cohorts was that cohort 2 (23.7%) had 21% more participants rearrested after three months than did cohort 1 (2.5%). Both cohorts 1 and 2 recidivated at virtually the same rate after six months, which does not include those rearrested after three months (17.5% and 18.4%, respectively). Overall, cohort 2 (36.8%) had a higher rate of rearrested START participants than did cohort 1 (20.0%).

Table 4.1

Rearrest at Different Intervals for Entire Sample and Separated by Cohort

Recidivism check	Entire Sample[a] (N=78)	Cohort 1 (N=40)	Cohort 2 (N=38)
0-90 days	11.5%	2.5%	23.7%
91-180 days[b]	16.7%	17.5%	18.4%
Total	26.9%	20.0%	36.8%

a. Entire sample based on first two cohorts only. Recidivism data unavailable for third cohort at this time.
b. Does not include those rearrested after 90 days.

Perceived Fairness by Participants

The independent variable of interest for this thesis was whether START participants felt they were treated fairly by the DeKalb County Jail staff. The perceived fairness variable was based on a facet of procedural justice with regard to the police and the courts that posits that these authoritative bodies are able to gain compliance if their constituents perceive these

authorities as fair (Tyler, 2001; Tyler and Huo, 2002). Perceived fairness was operationalized by the question, "Did you feel you were treated fairly by the jail staff?" Respondents chose "Yes" or "No."

Table 4.2 shows the results for the participants who reported they were treated fairly by the jail staff first for the entire sample and then separately for the three cohorts. Of the 112 participants that responded to this question, 52.9% answered that they felt the jail staff did not treat them fairly and 41.2% answered that they felt the jail staff treated them fairly, while 5.9% did not respond to this item. When analyzed by cohort, results revealed that participants in cohort 1 (30.0%) had the lowest rate of perceiving that they were treated fairly by the jail staff compared with cohorts two (43.9%) and three (50.0%).

Table 4.2.

Percentage of Participants who Perceived Fairness

Perceived fair treatment by jail staff?	Entire Sample (N=119)	Cohort 1 (N=41)	Cohort 2 (N=40)	Cohort 3 (N=38)
No	52.9%	67.5%	43.9%	47.4%
Yes	41.2%	30.0%	43.9%	50.0%
Missing	5.9%	2.5%	12.2%	2.6%

Impact of Procedural Justice on Recidivism

The major focus of this thesis was to examine whether a relationship existed between procedural justice and criminal recidivism for offenders with a substance abuse history participating in a jail-based RSAT program. It was hypothesized that those participants that perceived they were treated fairly by the jail staff would be less likely to be rearrested following completion of the START program and release from jail.

Table 4.3 shows the impact of the independent variable, procedural justice, on the dependent variable, rearrest, for the entire sample that responded to the question, "Did you feel you were treated fairly by the jail staff?" and for which recidivism data were collected (N = 74). The table reveals that of those participants who were rearrested within six months post-program release (n = 20), 40.7% felt they were treated fairly by the jail staff. Similarly, of those participants who were not rearrested within six months post-program release (n = 54), 40.0% felt they were treated fairly by the jail staff. A two by two (2 x 2) chi-square test did not find support for the hypothesis that those participants who perceive fair treatment by jail staff will be less likely to recidivate following completion of the START program and release from jail (χ^2(1, N = 74) = 0.003, p = 0.954).

Supplemental Analyses

Risk Factors. As mentioned above, the risk factors examined were criminal history, TCU Drug Screen II summed drug score, drug of choice, motivation for treatment, which are shown in table 4.3 along with the protective factors and control variables described below, the TCU Criminal Justice Client Evaluation of Self and Treatment (CJ CEST) scales, which are illustrated in table 4.4, and the TCU Criminal Thinking Scales (CTS), which are illustrated in table 4.5.

As predicted, offenders who recidivated had significantly more extensive criminal histories (M = 26.86, SD = 14.81) than offenders who did not recidivate (M = 14.04, SD = 11.30; t(76) = -4.076, p < 0.01). The range for number of arrests was 61, with the fewest being three and the most was 64. Table 4.3 shows the relationship between criminal history and recidivism.

Although none the relationships between recidivism and several of the scales on the CJ CEST were statistically significant, several of them were in the predicted direction. Table 4.4 illustrates the associations for each of the CJ CEST scales analyzed and recidivism.

As for the relationship between criminal history and recidivism, offenders who recidivated, as predicted, agreed with items tapping criminal rationalization significantly (M = 3.33, SD = 0.82) more than offenders who did not recidivate (M = 2.89, SD = 0.71; t(71) = -2.230, p < 0.05). The criminal rationalization scale was the only scale of the CTS that revealed a statistically significant relationship with post-program recidivism, as shown in table 4.5.

Protective Factors. The protective factors that were analyzed included marital status, employment history, parental status, education, and prior treatment history. There were no statistically significant differences for these factors as they related to post-program recidivism for this sample.

Control Variables. The control variables examined in this study were age, sex, and race. No statistically significant differences were found between START participants that recidivated and those that did not recidivate post-program release for any of these control variables.

The hypothesis of this thesis was that START program participants who felt they were treated fairly by the jail staff, with whom they interacted on a daily basis, would be less likely to be rearrested following completion of treatment and release from jail than those who did not feel they were treated fairly. This hypothesis was based on the extensive research supporting the use of procedural justice, specifically as it relates to authoritative bodies such as the police and courts treating people with respect. Further, the hypothesis was predicated on the evidence indicating that if people perceive authoritative bodies as fair and that they reach decisions fairly, they are more likely to comply with the law as they see these entities as legitimate. Support for this

hypothesis was not found based on the results in this study. The rearrested participants did not perceive the jail staff to be any more or less fair than those participants who were not rearrested following release from jail. However, it was found that those who did recidivate were significantly more likely to have been previously arrested than those who did not recidivate. This study was not without limitations. The following chapter will address these limitations in addition to discussing the results found in this study. Recommendations for future research and several policy implications will also be discussed.

Table 4.3

Differences between Participants Rearrested and not Rearrested (N = 78)

Variable	Rearrested (n = 21)	Not Rearrested (n = 57)	Test Statistic
Perceived fairness[a]	40.7%	40.0%	$\chi^2(1) = 0.003$
Age (year)	41.10(10.81)	39.19(9.69)	$t(76) = -0.745$
Sex			
Male	71.4%	75.4%	$\chi^2(1) = 0.129$
Female	28.6%	24.6%	
Race			
White	4.8%	19.3%	$\chi^2(1) = 2.491$
Non-white	95.2%	80.7%	
Marital Status			
Single	71.4%	63.2%	$\chi^2(2) = 1.819$
Married	19.0%	14.0%	
Separated/Divorced	9.5%	22.8%	
Employed prior to incarceration	52.4%	33.3%	$\chi^2(1) = 2.352$
Number of years education	12.14(1.80)	12.21(2.29)	$t(75) = 0.128$
Has children	90.5%	77.2%	$\chi^2(1) = 1.743$
Number of children[b]	3.00(1.73)	2.48(1.42)	$t(61) = -1.253$
# of prior arrests	26.86(14.81)	14.04(11.30)	$t(76) = -4.076*$
# of prior treatments (0-4)	0.95(1.16)	1.18(1.49)	$t(74) = 0.634$
Summed drug score (0-9)	5.81(2.44)	4.60(2.82)	$t(76) = -1.743$
Drug of choice[c]			
Crack/cocaine	72.2%	41.3%	$\chi^2(2) = 5.216$
None	11.1%	15.2%	
Other	16.7%	43.5%	
Seriousness of drug problem (0-4)	2.71(1.35)	2.40(1.38)	$t(74) = -0.892$
Importance to get treatment (0-4)	3.38(1.02)	2.84(1.51)	$t(74) = -1.519$

Note.
* $p < 0.05$, two-tailed
a. Calculated among those who responded to perceived fairness item (N = 74).
b. Calculated among those with children (N = 63).
c. Calculated among those who responded to drug that caused most serious problem (N = 64).

Table 4.4

Differences between Participants Rearrested and not Rearrested on the Criminal Justice Client Evaluation of Self and Treatment Scales.

Scale	Rearrested (n = 21)	Not Rearrested (n = 57)	Test Statistic
Desire for help	4.10(0.58)	3.92(0.74)	t(74) = -0.973
Treatment readiness	3.97(0.46)	3.71(0.59)	t(72) = -1.785
Treatment needs	3.69(0.91)	3.22(1.01)	t(75) = -1.848
Decision making	3.85(0.54)	3.90(0.59)	t(69) = 0.273
Hostility	2.06(0.82)	2.30(0.84)	t(70) = 1.126
Risk taking	2.57(0.54)	2.78(0.72)	t(75) = 1.205
Treatment participation	4.40(0.35)	4.28(0.54)	t(70) = -0.890
Treatment satisfaction	3.98(0.61)	3.87(0.67)	t(73) = -0.629
Counseling rapport	4.20(0.46)	4.21(0.56)	t(73) = 0.012
Peer support	3.70(0.82)	3.65(0.71)	t(75) = -0.256
Social support	4.17(0.56)	4.17(0.54)	t(71) = 0.006

Note. All CJ CEST scales are 5 point scales where 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, and 5 = strongly agree.

*p < 0.05, two-tailed

Table 4.5

Differences between Participants Rearrested and not Rearrested on the Criminal Thinking Scales

Scale	Rearrested (n = 21) Mean (SD)	Not Rearrested (n = 57) Mean (SD)	Test Statistic
Entitlement	1.70(0.44)	1.64(0.60)	$t(72) = -0.412$
Justification	1.90(0.49)	1.81(0.60)	$t(75) = -0.658$
Power orientation	2.37(0.64)	2.34(0.68)	$t(69) = -0.155$
Cold heartedness	2.18(0.42)	2.41(0.63)	$t(74) = 1.574$
Criminal rationalization	3.33(0.82)	2.89(0.71)	$t(71) = -2.230*$
Personal irresponsibility	2.21(0.62)	1.91(0.70)	$t(72) = 1.717$

Note. All CTS scales are 5 point scales where 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, and 5 = strongly agree.

$*p < 0.05$, two-tailed

CHAPTER FIVE

Discussion

A breadth of research has been conducted over the years examining the effectiveness of Residential Substance Abuse Treatment (RSAT) programs and therapeutic communities (TC) (Bahr et al., 2012; Eisenberg & Fabelo, 1996; Hiller et al., 2002; Lockwood et al., 1997; Simpson, 2004; Taxman & Bouffard, 2000; Welsh, 2007). Moreover, research examining post-program criminal recidivism of offenders that participated in RSAT programs and TCs has been present for over two decades (De Leon et al., 1997; Field, 1989; Hiller et al., 2006; Inciardi, 2004; Knight et al., 1999; Prendergast et al., 2004; Wexler et al., 1999). Likewise, there is extensive research on procedural justice, specifically how it relates to authoritative bodies such as the police and the courts gaining the compliance and deference of the people (Casper et al., 1988; Cherney & Murphy, 2011; Hough et al., 2010; Lin, 2000; Sunshine & Tyler, 2003; Tankebe, 2009; Tyler, 1984; Tyler, 2001; Tyler, 2003; Tyler & Huo, 2002) and even criminal recidivism of domestic violence offenders (Paternoster et al., 1997). However, no known research to date has examined whether a relationship exists between procedural justice and criminal recidivism among offenders with substance abuse problems. As such, determining whether implementing aspects of procedural justice into a jail-based RSAT program for offenders with substance abuse issues and histories of multiple incarcerations may reduce recidivism, thereby decreasing the incarcerated population, may be beneficial.

The current study provided one of the first known attempts to examine the potential influence of procedural justice on post-program recidivism for offenders participating in a jail-based RSAT program. It was hypothesized that START program participants who felt they were treated fairly by the jail staff, whom with they interact on a daily basis, would be less likely to be

rearrested following completion of treatment and release from jail. Moreover, several risk factors (criminal history, TCU Drug Screen II drug score, drug of choice, motivation for treatment, TCU CJ CEST Scales, and TCU CTS) and protective factors (marital status, employment history, parental status, education, and prior treatment history) were analyzed to determine if differences between those who recidivated and those who did not recidivate existed.

Perceived fairness was measured utilizing the START Participant Survey, in which respondents indicated whether they felt they were treated fairly or unfairly by the jail staff. The outcome variable in this study was whether or not START participants were rearrested within six months of release from jail. The relationship between these two variables was analyzed using a Pearson Chi-Square test and results revealed no statistically significant difference between recidivists and non-recidivists relative to perceived fairness by jail staff. This null finding may be due to several factors. First, the non-specific criteria (e.g. have a substance abuse history and minimum of three separate prior incarcerations) of this treatment program allows for a wide-ranging and heterogeneous sample of offenders to be placed into START. For example, there are individuals who have as few as three previous arrests and some with over 60. Similarly, treatment participants had varying degrees and levels of drug use and differed in the types of drugs used. These two aspects indicate that offenders in this program had many different types of criminogenic and treatment needs. Therefore, it is possible that for those offenders with greater treatment needs, that the quality of treatment itself is more important to reducing recidivism than feeling as though they were treated fairly. A large portion of this sample fit this bill of requiring more intense treatment based on their TCU Drug Screen II and official criminal records. A third factor that may be related to the null finding is that the sample size used for analysis was relatively small (N = 78). Furthermore, only 26.9% of the sample (n = 21) were

rearrested within six months of release from custody. A larger sample size would likely yield more individuals being rearrested, thereby increasing the variance on the perceived fairness variable. Finally, the measure of procedural justice may not have been sufficient to tap procedural justice. For instance, the measure utilized asked the participants to determine whether they themselves were treated fairly by the jail staff. This is a broad measure of procedural justice, and even of perceptions of fairness. Some research has broken down perceived fairness further to tap into not just whether individuals felt they were treated fairly, but whether they felt authority figures reached decisions fairly, regardless of the outcome (Lin, 2000; Paternoster et al., 1997; Tyler, 2001, Tyler, 2003). Furthermore, Tyler (2001) found that perceiving respect from authoritative bodies is a key aspect of procedural justice. This study did not mention respect in any item pertaining to procedural justice, and therefore may have left out a relevant piece with regard perceived fairness. More specific measures of perceived fairness may have revealed different findings related to the association between procedural justice and criminal recidivism for offenders with substance abuse problems.

Although the relationship between the variables of interest was not statistically significant, two of the risk factors analyzed were related to post-program criminal recidivism. Those individuals who recidivated had significantly more extensive criminal histories, operationalized as number of arrests prior to beginning the START program, than those who did not recidivate This finding does not come as a surprise because it supports the long-held notion that previous behavior predicts future behavior (Blumstein, Farrington, & Moitra, 1985; Nagin & Paternoster, 1991). In this case, the more criminal involvement individuals engage in at specific time, the more likely they are to engage in criminality in the future (Wolfgang, Figlio, & Sellin, 1972). Additionally, those participants who recidivated generally displayed a more negative

attitude toward the law and authoritative bodies than those who did not recidivate based on the criminal rationalization scale of the TCU Criminal Thinking Scales (CTS). Again, this is not surprising as previous research supports this finding (Knight et al., 2006).

Limitations

Although this study examined thoroughly the differences between individuals who recidivated and those who did not on many different variables, it was not without limitations. First, the current study was based on a sample of offenders with wide-ranging substance abuse histories and various degrees of criminal involvement. The limited criteria of the START program mentioned in the previous section contributed mainly to such a diverse population of offenders receiving the same treatment. Testing the relationship of procedural justice on post-program recidivism on a population that has less diverse substance abuse and criminal histories may reveal more of an effect related to procedural justice, specifically the impact of perceived fairness. For example, for some offenders, the importance of treatment for criminogenic behavior and substance abuse may outweigh the relevance of procedural justice or perceiving fair treatment. In this case, the impact of procedural justice on criminal recidivism is being masked by influence of criminogenic and treatment needs.

A related limitation concerns the manner in which procedural justice was measured in this study. As previously mentioned, the measure of perceived fairness may have been too broad and perhaps did not tease out the different aspects of procedural justice sufficiently. For instance, this study did not address the issue of respect as previous tests of procedural justice have in the past (Tyler, 2001; Tyler & Huo, 2002). This omission of asking participants whether they felt respected by the jail staff in addition to whether they felt that they were treated fairly may have produced different results. Similarly, another feature of procedural justice excluded in

this thesis was inquiring participants whether they felt that the jail staff reached decisions fairly (Lin, 2000; Paternoster et al., 1997, Tyler, 2003). For example, asking each offender whether they felt that the jail staff administered punishment fairly to everyone would have been one way of tapping into this key element or procedural justice.

Another possible limitation was the relatively small sample size (N = 78) based on the first two cohorts to complete the program. Although program and survey data for the third cohort were presented in the methods section, criminal recidivism was unavailable for analysis, preventing that data from being included in the results section. The addition of the third cohort would have increased the sample size to approximately 120 participants, thus increasing the power of the study. However, the criminal recidivism data was unavailable for this cohort at three months because DeKalb County Jail chose not to produce GCIC reports until six months, likely in an effort to conserve on paper and time making it impossible to include the third cohort in the study at hand.

A fourth potential limitation of this study was the measure of criminal recidivism. The measure was completely based on official records of rearrest, which do not capture all offenses committed. It is possible that, especially with a sample that has individuals with well-documented substance use involvement and multiple incarcerations, the study participants could possibly have recidivated, either by engaging in drug use or in other types of offenses without it being officially recorded. Although it is unlikely drugs were involved, as these individuals are likely to be tested regularly while on release from custody, other criminal involvement may be occurring.

Lastly, a fifth limitation of this thesis was the lack of a time at risk variable. Although not reported in any preceding section, approximately one-third of the sample was detained by

other jurisdictions upon graduation from the START program and release from DeKalb County

Jail. Utilizing the records kept by the GCIC and DeKalb County Online Judicial System (OJS),

the researcher found that only one individual was detained beyond six months after release, and

most were released by these other jurisdictions within one week after being released from the

DeKalb County Jail. However, due to missing data and vague records kept by the GCIC and

OJS, determining when several of these detained offenders were released was difficult because

the dates were inaccurate. Because records indicated that they were not in custody in any

jurisdiction, this small portion of individuals was included in the analysis.

Recommendations for Future Research

The first limitation discussed pertained to the various types of offenders with distinctive

drug problems. The START program was not very intensive as compared to the KEY/Crest or

Amity RSAT programs discussed at the beginning of this thesis. This treatment program was

only 90 days long whereas the more intensive programs are generally at least a year in length and

include aftercare. Even though Bahr et al. (2012) found low rates of recidivism for a 30-day jail

based drug treatment program, similar to the START program, it was much more intense than

was the START program. For example, clients in their study were receiving treatment for a

minimum of five hours per day for a total of over 100 contact hours (Bahr et al., 2012). START

program clients did not spend nearly this much time per day and received far less attention from

the START program staff. Secondly, appropriate jail-based RSAT programs and therapeutic

communities are supposed to isolate the clients from the rest of the incarcerated offenders so that

the culture of the general population does not influence the individuals attempting to receive

treatment (Field, 1985). One potential direction for future research would be to examine

procedural justice in a more intensive RSAT program in which the offenders have more similar

criminogenic and treatment needs. It is possible that it is more important that treatment participants perceive fairness when they are subjected to intense and exhausting treatment as this may help motivate and encourage them to complete the program, thereby increasing compliance with the law upon release from jail.

The second limitation describes the measure of procedural justice and the possibility that it led to the null findings. One avenue for future research is to include more specific measures of procedural justice in addition to a broad one as was done in this study in order to tease out the different elements. For example, researchers should include items that tap into respect, agency, and the fairness of decisions made by authority figures. It could be that being treated with respect is more important to offenders with substance abuse issues because many of them come from areas where drug use and violence is prevalent and respect is of the utmost importance (Anderson, 1999). Incorporating these variables into a study may improve the operationalization of and make the measurement of procedural justice more comprehensive. Relatedly, a Likert-type scale as opposed to a dichotomous measure of fairness may provide a more thorough analysis. Because a Likert-type scale allows for several response choices, based on degree rather than yes or no, more variance in participant answers is possible.

Moreover, in addition to analyzing number of arrests future research should examine the relationship between the number of charges an individual has attained as a measure of criminal history. This way of measuring criminal involvement can provide a greater depth of knowledge of the criminal behavior of offenders. Though not included in the analysis, trends indicated that as the number of arrests increased for an offender, the number of charges increased more for each arrest. For instance, an individual with three arrests may have been charged with only three or four separate crimes. However, an individual with 30 arrests was more likely to have over 50

different charges. Not only does this aspect speak to the depth of criminal involvement from the individual offender's standpoint, but it is also important to understand from a system response perspective. The criminal justice system may be applying more charges per arrest as the number of arrests increases for an individual. Understanding how this may affect recidivism could be key to tailoring RSAT programs more specifically to certain offenders.

Future research should also examine gender differences with regard to the potential relationship of procedural justice and criminal recidivism. Differences between male and female offenders with substance abuse histories have been well-documented as they relate to motivation for treatment, treatment needs, and completion rates (Arfken et al., 2000; Hiller et al., 2002; Gray & Saum, 2005; Staton-Tindall et al., 2007). This indicates that the content of RSAT programs should be modified based on the gender they intend to treat. Future research should attempt to examine the effects of procedural justice in programs specifically designed for males and females to understand any potential differences.

Finally, another key component future research should consider is a time to failure variable. It is possible that the START program delays onset or return to criminal behavior rather than leading to desistance solely. Such findings have been found in other studies (Inciardi et al., 2004; Prendergrast et al., 2004).

Conclusions

This study attempted to examine the relationship between procedural justice and its effects on post-program criminal recidivism for offenders participating in a jail-based residential substance abuse treatment program. Specifically, program participants' perceptions of fair treatment by jail staff were studied to determine if they were related to being rearrested following program completion and release from jail. For this sample of offenders with substance

abuse histories, post-program criminal recidivism did not appear to be related to procedural justice. However, this study did find that only 28.2% of START program graduates recidivated, which is relatively low. However, this rate should be interpreted with caution, as it did not account entirely for graduates' time at risk since some participants were detained by other jurisdictions after completing treatment. Furthermore, the analysis indicated that those who recidivated had many more previous arrests than those who did not recidivate. The policy implications of these issues are discussed next.

Most of the individuals who recidivated had more extensive criminal histories, indicating that the START program was not intense enough for this portion of the sample. Policies to remedy this issue should include more appropriate assessment of offenders with substance abuse problems and incorporate more intense treatment for those offenders with more severe criminogenic and treatment needs. Moreover, open lines of communication are necessary between different agencies involved in the assessment and treatment process (e.g. jail staff and treatment staff) because these entities have an immense impact on the lives of this sensitive population. Maintaining fluid communication will help to ensure that treatment is administered appropriately and that all parties involved in the treatment process are on the same page. Policies such as these can contribute to a reduction in recidivism following release from treatment. Although a link was not established between perceived fairness and criminal recidivism in this study, it is important for future research to study procedural justice as it relates to criminal recidivism for offenders with substance abuse histories because of their high rates of recidivism in an effort to gain compliance from this special population, thereby potentially reducing recidivism.

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