Treatment Readiness Among Criminal Justice Clients Mandated to Drug Treatment

By

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Abstract

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Alternative-to-Incarceration (ATI) programs serve not only an economical measure to reduce the costs associated with incarcerating drug-abusing offenders but also to disrupt the cycle of drug use and prison with judicial monitoring and treatment. There is extensive research on motivation for drug treatment among criminal justice clients and the relationship to treatment outcomes. However, research examining treatment readiness among criminal justice clients entering drug treatment is limited.

This research assessed treatment readiness among drug abusers mandated to drug treatment using the Circumstance, Motivation, and Readiness for Substance Abuse Treatment (CMR Factor Scales Intake Version). Treatment readiness and its relationship to client factors such as client type, criminal justice referral type, drug treatment history, and criminal justice history were studied. The research included 139 participants in a drug-free residential treatment program. Multi regression was used to analyze the data from all participants. The research findings were mixed regarding treatment readiness and its relationship to client factors among mandated clients. These findings are examined in the context of this research, and implications for the social work and future policies are discussed.

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CHAPTER I

INTRODUCTION

The cost of drug abuse to society is estimated at $180 billion and has a far-reaching impact beyond the individual drug offender (Office of National Drug Control Policy [ONDCP, 2004]). Its effect is felt in the criminal justice, economic, and healthcare sectors of society, each resulting in significant financial costs. A 2005 RAND Drug Research Policy reports illegal drugs are a $60-billion-per-year industry patronized by at least 16 million Americans (Caulkins, Reuter, Iguchi, & Chiesa, 2005). It is estimated that Americans spent $36 billion on cocaine, $11 billion on heroin, $10 billion on marijuana, $5.8 billion on methamphetamines, and $2.6 billion on all other illegal drugs combined (Caulkins et al., 2005). Much of the economic burden related to drug activities falls to taxpayers and victims of drug abusers' illegal activities (Harwood, Fountain, & Livermore, 1999).

The greatest share of this cost is incurred by the criminal justice sector, including cost related to legal and adjudication and corrections. One of the major efforts to reduce the social cost of drug abuse, particularly the cost attributed to the judicial system, is through drug treatment (Harwood, Hubbard, Collins, & Rachal, 1988). A strategy for reducing drug demand is the combination of legal efforts with drug treatment as a dual control approach. The practice of combining drug treatment with criminal sanctions to deal with drug use has occurred as social policy during most of the 20th and part of the 21st centuries. Early evidence of this approach was with Federal narcotic farms in the 1930s; civil commitment programs in the 1960s; and the introduction of Narcotic Addict

Rehabilitation Act (NARA) in 1966. These developments transformed present-day drug treatment programs that serve the criminal justice population. Advocacy for policy changes in drug and sentencing policies has led to Alternative-to-Incarceration (ATI) programs such as Treatment Accountability for Safer Communities (TASC), Drug Court, and Drug Treatment Alternative to Prison (DTAP). These ATI programs are aimed at reducing the prison population of non-violent drug-abusing offenders. Alternative-to-Incarceration programs primary function is not only to provide drug treatment in lieu of prison sentences but also, to release individuals back into society addiction-free so they can refrain from criminal activities. A component factor of ATI programs is that drug treatment is cheaper than incarceration and addiction that go untreated (Sims & Du-Pont Morales, 2004).

Research published in the late 1980s and early 1990s urged for use of legal mandates for drug treatment and argued that it represented an important policy and economic direction (Anglin & Maugh, 1992; Leukefeld & Tims, 1990; Lipton, 1995). Current programs such as TASC, Drug Court, and DTAP that offer drug treatment options in lieu of jail or prison to drug-abusing offenders do not guarantee the drug offender will enter treatment motivated and prepared to engage in therapeutic activities to bring about behavioral changes. Some level of behavioral change must be accompanied by motivation, whether external through ATI programs or internal through the drug offenders' own desire for change. In order for changes to occur, motivation for treatment is important to the therapeutic process. Studies have shown criminal justice clients who enter drug treatment with a high level of motivation are compliant, committed to treatment, and have greater treatment retention. Other studies have shown that criminal

justice clients tend to be less compliant and are not ready to participate in drug treatment when compared to voluntarily admitted clients (Kelly, Finney, & Moos, 2005; Knight, Hiller, Broome, & Simpson, 2000; Longshore & Teruya, 2006). Researchers have argued the one likely reason for noncompliance is that individuals must be internally motivated to participate in treatment and, thus, argue against mandating drug treatment.

Motivation, external or internal, is broadly defined in terms of why individuals make behavioral changes and the strength of their desire to do so (De Leon, Melnick, & Kressel, 1997). Motivation has long been acknowledged as important to the treatment process, and is viewed by counselors as a prerequisite, without which they can do nothing (Beckman, 1980). Lack of motivation explains the failures of individuals to enter, continue, comply, and succeed in drug treatment (Miller, 1985). A 2002 survey by the Bureau of Justice Statistics of over 6,000 inmates in local jails revealed that 63% of inmates who met the criteria of abuse or dependence, participated in drug program or other programs in the past (Karberg & James, 2005). Howells and Day (2003) note that the legal status of a client does not, in itself, provide any indication of his/her readiness to be treated. For clients who need treatment and perceive it as helpful in meeting their needs, legal pressure to attend will become a less significant issue. Studies have found that clients' readiness for treatment at intake tallies with the development of better therapeutic relationships, more favorable treatment outcomes, and increased treatment retention (Joe, Simpson, & Broome, 1998). Studies have also shown clients who score high on treatment readiness assessment at intake, are more likely to complete treatment and achieve abstinence ahead of clients scoring low on readiness assessments (Joe et al., 1998; Longshore & Teruya, 2006). Important to the treatment process is internal

motivation specifically, treatment readiness. An important aspect of internal motivation is treatment readiness. De Leon and Jainchill (1986) define treatment readiness for drug treatment as the perception that treatment is necessary in order to achieve behavioral changes. Treatment readiness involves the openness and preparedness to engage in treatment activities designed to achieve and maintain changes.

The purpose of this research was to assess readiness for drug treatment among drug-abusing offenders mandated to drug treatment by the criminal justice system. This research seeks to augment existing knowledge on the alternatives to incarcerated population through research questions exploring relationships between treatment readiness and client attributes among mandated clients.

Following the introductory chapter, chapter two discusses the development of present-day drug policies, highlighting the transition from non-criminalized to criminalized sanctions for drug use and the resulting impacts, and implications for social work. Chapters three and four explore the research concepts and the theoretical perspective relevant to the research. Chapter five reviews the literature on motivation and criminal justice clients in drug treatment. Chapter six focuses on the research method that includes research design, target population, data collection instruments and procedure, and data analysis approach. Chapter seven presents the research findings, and this document concludes with chapter eight that discusses policy implications and future research directions.

CHAPTER II

BACKGROUND AND SIGNIFICANCE

Drug policies throughout U.S. history are a reflection of the political, racial, and social influences from the time of its development (Coomber, 1998). This chapter provides an overview on the development of drug policies, highlighting the transition of drug use from a non-criminalized to a criminalized act and the sanctioning policies to address drug use. This chapter will also explore the social and economic impacts of the sanctions and the development of alternative options to address drug use. The chapter will then conclude with implications for the social work field.

Drug Use—Non-criminalized

During the 1800s, the most commonly used drugs were opium and morphine to cure common ailments and to relieve the discomfort experienced by women. These drugs were accessible through physicians' prescriptions and were also key ingredients in tonics and patent medicines sold in local drug stores (Belenko, 2000). The predominant users of these drugs were White middle-aged, middle- and upper-class women and constituted the majority of physicians' patients base during this time. Physicians frequently treated women for female-related medical problems such as the discomfort associated with menstrual cycles and menopause, and for what was referred to as "nervousness" (Belenko, 2000: Courtwright, 1982; Morgan 1981). This "nervousness" was believed to be the result of women shouldering the "social responsibility" of maintaining a household and performing charitable works as part of the modern industrial order (Morgan, 1981). Women found relief from these pressures and responsibilities through physicians'

prescriptions. During this time period, there were no restrictions or regulations on the frequency of prescribing opium or morphine or products containing these ingredients.

By the 1860s, the United States was in the midst of the industrial revolution that not only brought changes to the manufacturing and transporting of goods and products, but also resulted in the immigration of the Chinese to the U.S. to work on railroad construction projects (Belenko, 2000). As Chinese immigrants created communities in places such as San Francisco, they established their cultural practice of opium smoking and thus, introducing a new form of opium to Americans (Belenko, 2000; Courtwright, 2001, 1982). Chinese immigrants introduced and operated opium dens that allowed for smoking opium with no restrictions regarding their operation or regulation on opium use.

Non-punitive Sanctions

Resulting measures to control drugs such as opium, morphine, and opium dens operations included several non-punitive sanctions (Morgan, 1974). The increased number of white youth and women who were becoming addicts to substanes either through use for medical puurposes or through consistent visits to opium dens were seen as a threat to the well-being of the dominant culture and also created concerns regarding the changes in quality of life (Musto, 1999). By 1900, there were approximately 250,000 individuals identified as being addicted to substances such as opium and morphine (Musto, 1999). Early drug policies used to control drugs and availability were non-punitive in nature. Non-punitive action sanctions included measures such as requiring manufacturers to identify ingredients in patent medicines and tonics. One of earliest non-punitive drug policies introduced was the Pure Food and Drug Act of 1906 requiring the accurate labeling of ingredients in patent medicines and tonics (Belenko, 2000). The

Pure Food and Drug Act was passed out of concern for the number of individuals addicted to patent medicines and tonics that provided no medical benefits. The Food and Drug Act not only sought to inform the public on ingredients used in the medicines and tonics but also made it possible to outlaw products that were not safe or effective in treating aliments.

Another non-punitive control measure introduced was the Smoking Opium Exclusion Act of 1909 banning the importation of opium for non-medical purposes (Gieringer, 2009; Morgan, 1974). The introduction of the Smoking Opium Exclusion Act was geared primarily towards the Chinese and was met with little resistance by Whites for three key reasons: its users, its therapeutic value, and its lack of interests among the dominant culture. First, the identified primary users of opium were the Chinese who emigrated to the U.S., bringing with them their cultural practice of opium smoking. The identified users of opium were those of a lower class such as gamblers and prostitutes who frequently visited opium-smoking dens. The Opium Smoking Exclusion Act was passed more out of fear and discrimination towards a foreign culture and concerns that opium smoking was ruining lives among Whites, and less out of concern for public health and safety (Belenko, 2000; Woodiwiss, 1998). The second reason for little resistance towards the adoption of the Smoking Opium Exclusion Act was that physicians found no therapeutic value in smoking opium and therefore saw no value in its import to the U.S. Medical professionals no longer supported early beliefs that opium provided some medical benefits. Finally, there was little resistance towards the ban on opium imports because American firms saw little or no financial interest in opium imports (Belenko, 2000). With no therapeutic values from the medical profession, there

were little financial interests from business firms in importing opium. Discrimination and growing anti-Chinese sentiments formed the basis for prohibiting opium use and its importation. Other steps taken to minimize the threat to the dominant culture included reducing the number of Chinese immigrants allowed in the U.S. America saw a reduction in Chinese immigration from 103,620 in 1890 to 53,891 in 1920 (Courtwright, 1983). It was believed any reduction in the immigration of Chinese would affect the number of operating opium dens in the country.

With the change in technology and shift in culture, there was also a shift in drug use from morphine and opium to cocaine. Cocaine was considered beneficial for medical purposes and used as an ingredient in tonics and patent medicines to treat illnesses (Belenko, 2000). The medical community promoted cocaine as a cure for ailments such as hay fever, various respiratory infections, and also as a cure for those addicted to opiates (Belenko 2000; Musto, 1999). Medical promotions also included marketing tonic drinks containing cocaine as a key ingredient. Tonics were marketed as having the ability to "restore power and vitality of the weary and debilitated" (Spillane, 1994 as cited in Belenko, 2000). In addition to medical purposes, cocaine was also widely used as a substitute for alcohol during the temperance movement. Early legislation such as the Webb-Kenyon Act of 1913 made it illegal to purchase alcohol from "wet states", states that were legally allowed the sale and use of alcohol for transport to "dry states" which prohibited its sale and use (Musto, 1999). The resulting impact of the Webb-Kenyon Act of 1913 prohibited the transportation and sale of alcohol. This created a shortage of alcohol in southern states causing southerners, in particular Blacks, to substitute alcohol

with products such as coca-cola, which contained cocaine as its key ingredient, which created a similar euphoric feeling (Musto, 1999).

The use of cocaine soon became associated with Blacks and the lower working class, where cocaine use was considered "quite common among working negroes" (New York Times, 1911 as cited in Morgan, 1981). Soon, there were exaggerated reports of Blacks being admitted to asylums for cocaine use and the belief that Blacks under the influence of cocaine "would rise above his place" created fears among Whites (Musto, 1999). Blacks were viewed as timid and law abiding but were seen as a menace when under the influence of cocaine, posing a threat to Whites. Similar to the fears among Whites about opium and Chinese, there were fears regarding cocaine use among Blacks. This potential threat served as a catalyst for laws to protect White communities from "cocaine-crazed blacks" (Spillane, 1994 as cited in Belenko, 2000). Opium, morphine, and cocaine were viewed as threats to White women and youth who were important to the emerging industrial era. The need to preserve and to protect these groups, created a shift from a permissive attitude to a controlled and punitive approach towards drug possession and its use.

Drug Use—Criminalized

The industrial era brought about the emergence of the middle-class and the view of women being important to the promotion of the family. Women were idealized as marital partners and mothers and seen as key to the new emerging industrial society. This view created a shift in the permissive attitude and non-restrictive approach to drug use and its availability. It was believed that anything that altered women's energy or insight was a potential threat to the values and aspirations of the developing society and

the growth of the family (Morgan, 1981). Just as women were important, White young men from affluent families were also important to the promotion of the family and its lineage. The frequent visits to opium dens created concerns that innocent young people from respectable families were being ruined and, thus, were required to stop these influences. Subsequently, policies were implemented to protect individuals from the dangers of drug use and punish those who promoted its use.

Punitive Sanctions

The transition from non-punitive to punitive sanctions was evident by the change from the Pure Food and Drug Act of 1906 to the Harrison Act of 1914. The Harrison Act was implemented to control the marketing of opium and morphine in order to limit the quantities used in products sold by stores and those prescribed by physicians, and to prohibit the use of products that offered little or no therapeutic value. The Harrison Act was initially thought to be non-punitive in nature by imposing taxes on anyone who produced, imported dispensed, or sold opium. It required pharmacists and physicians prescribing narcotics to be licensed and to keep records of drugs dispensed or prescribed (Brecher, 1972). However, the language established in the Harrison Act led to the arrest of physicians due to the interpretation of "dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon registered under this Act in the course of his professional practice only" (Brecher, 1972). Enforcement officers arrested physicians because at the time, addiction was not recognized as a disease and therefore treatment of addicts was not "in the course of his professional duties" (Brecher, 1972). The interpretation of the Harrison Act and the arresting of physicians were viewed as criminalizing those suffering from an addiction rather than providing

treatment. The change from the Pure Food and Drug Act to the Harrison Act represented an increase in sanctions for drug use. The Pure Food and Drug Act simply required the labeling of ingredients in patent medicines and tonics and imposed no punitive measures, whereas the Harrison Act imposed criminal sanctions for the distribution of drugs such as opium and morphine to those who were addicted.

In an effort to gain greater control over drug use, the Federal government began imposing mandatory minimum prison sentences for the sale and possession of heroin and cocaine by establishing the Boggs Act in 1951. The Boggs Act was introduced as a result of concerns by legislative officials and public reactions to reports of increased drug arrests and the apparent increased number of White young adults falling victims to drug use (Belenko, 2000). Legislators believed a more punitive approach to drug control would not only reduce drug use, but also eliminate it entirely. The Boggs Act was one of the first drug control policies that imposed mandatory minimum prison sentences, a greater departure from the sanctions of the Harrison Act of 1914. Under the Boggs Act, a first offense for possession of cocaine or heroin carried a minimum prison sentence of two years with a maximum of five years; a second offense carried a minimum of five years and a maximum of 10 years; and a third offense carried a minimum of 10 years and a maximum of 15 years. Subsequent to the Boggs Act of 1951, the Narcotics Control Act, passed in 1956, called for more punitive measures. The Narcotics Control Act increased the minimum prison sentences of the Boggs Act for drug possession from five years to 10 years for the first offense, second offense increased from 10 years to 20 years, and the third offense minimum went from 20 years to life (Belenko, 2000). The penalties for importing drugs increased from five years to a maximum of 20 years, and went as far

as imposing the death penalty for the sale of drugs to children under age 18 (Campbell, 2009; Belenko, 2000; Jensen & Gerber, 1998). The Narcotics Control Act was another attempt to reduce drug use and ultimately eliminate its availability. Early punitive drug-control policies such as the Harrison Act, Boggs Act, and Narcotics Control Act formed the basis for present-day punitive drug control policies such as the Rockefeller Drug Laws and the Anti-Drug Laws of the 1980s.

Rockefeller Drug Laws

Present-day approaches to drug control policies remain punitive in nature imposing criminal sanctions on offending individuals. The current and most punitive sanction for drug offenses are the Rockefeller Drug Laws enacted in 1973 (at the time of this research some areas of the Rockefeller Drug Laws were amended and will be highlighted later) signed into law by then New York Governor, Nelson Rockefeller, who believed the laws at the time were not tough enough to deter drug use and its associated crimes. Under the NY Rockefeller Drug Laws, possession of four ounces or sale of two ounces of narcotics carried a minimum sentence of 15 to 25 years and a maximum of life in prison. Possession of two ounces or sale of half an ounce carried a minimum sentence of three to eight and one-third years with a maximum of life in prison (Human Rights Watch, 1997). Under these laws, circumstances regarding the offense or the offender's character are not taken into consideration by judges, only the quantity of drugs the offender is charged with possessing is important.

Since the enactment of the Rockefeller Drug Laws in 1973 there have been approximately 200,000 individuals sent to NY state prisons for drug-related offenses, and while the number of drug offenders increased during the mid-1980s, there was an

increase of approximately 100,000 prison admissions for drug related offenses. From 2000 to 2006 there were approximately 45,000 convictions under the Rockefeller Drug Laws (New York Civil Liberties Union, 2009). According to the Correctional Association of New York (2008) there were 13,400 drug offenders in NY state prisons as of January 1, 2008; 905 women (33% of total female population) and 12,520 men (21% of total male population). The cost to NY state is approximately $1.5 billion in construction to house drug offenders and approximately $500 million annually in operation expenses for individuals never convicted of a violent felony (Correctional Association, 2008). The Rockefeller Drug Laws are the most severe drug laws in the nation, where the sentences are similar to those of a second-degree murder conviction (Human Rights Watch, 1997). The severity and character of the Rockefeller Drug Laws have resulted in a disproportionate number of people of color being incarcerated. For example, there were 58.5% African Americans, 31.5% Latinos, and 8.9% Whites incarcerated for drug offenses as of January 1, 2008 (Correctional Association, 2008).

Anti-Drug Abuse Acts of 1986 and 1988

The Anti-Drug Abuse Acts of 1986 and 1988 were enacted as a result of the introduction of crack cocaine, a new cheaper form of powder cocaine. Crack cocaine is marketed for its cheap price and availability to a wider economic class (The Sentencing Project, 2009[a]). Crack cocaine is made from mixing powdered cocaine with water and ammonia or baking soda, then heating the mixture until it forms a hard rock-like substance where it is broken into small pieces and sold. The low-grade manufacturing process made it possible for individuals to make profits by turning a few ounces of cocaine into large quantities crack cocaine. During the 1980s, the media used terms such

as “crisis” and “epidemic” to describe the prevalence of crack cocaine, the associated violence, and the addiction among its users (Belenko, 2000; Sentencing Project, 2009[a]). The continuous media coverage on crack cocaine, its impact during the 1980s on society, and public outcries contributed to the passing of the Anti-Drug Abuse Acts (Sentencing Project, 2009[a]).

The Anti-Drug Abuse Act of 1986 established mandatory minimum sentencing for crack cocaine offenses. Drug offenders convicted for possessing five grams of crack cocaine, the weight of less than two sugar packets, are subjected to a five-year mandatory minimum sentence; whereas those convicted of possessing cocaine must possess 500 grams of cocaine, 100 times the minimum quantity of crack cocaine to face the same five-year penalty (Sentencing Project, 2009[a]). A person convicted for the possession of five grams of crack cocaine is subjected to the mandatory five-year prison term while someone possessing five grams of powder cocaine will probably receive probation (Sentencing Project, 2009[a]). While the Anti-Drug Abuse law was intended to target high-level drug traffickers and head of drug organizations with access to large quantities of cocaine, the unintended consequences resulted in street level drug dealers being arrested. Street level drug dealers recruited to distribute or sell drugs are less likely to have large quantities of cocaine and are also more likely to be targets in drug bust operations resulting in arrests. The high-level drug traffickers are unlikely to be on street corners and therefore, less likely to be arrested. The disparities in the law created a situation were a significant number of low-level dealers were being apprehended for drug possession. In 2005, two-thirds of crack cocaine defendants were low-level dealers whereas 1.8% of

were high-level suppliers (Drug Policy Alliance Network [DPAN], 2009[a]; Sentencing Project, 2009[a]).

Two years following the 1986 Anti-Abuse Act, the Anti-Drug Abuse Act of 1988 Act was enacted. The 1988 Act called for even stiffer penalties, such as the death penalty for drug-related murders, and the inclusion of a mandatory life imprisonment for a third felony drug conviction (Belenko, 2000). Despite the enactment of additional penalties, one important provision to the 1988 Act was the creation of the Office of National Drug Control Policy (ONDCP). The role of the ONDCP is to develop short and long term goals and strategies to address controlling and reducing illicit drug use, its manufacturing and trafficking, drug-related crimes, and health consequences (www.whitehousedrugpolicy.gov). The ONDCP was viewed as a turning point in an effort to control drug use through alternative means other than punitive sanctions and incarceration.

Rockefeller Drug Laws Reform

Change to the draconian Rockefeller Drug Laws occurred in December 2004 and August 2005, however, both changes did not make significant changes to the current mandatory minimum sentencing policy (Correctional Association, 2009[a]). The reforms in 2004 and 2005 made minor changes to the sentencing structure by moving from an indeterminate sentencing, that is, sentencing with no definite duration, to a determinate sentencing where defendants received a definite prison sentence term. Defendants no longer faced sentences with long minimum and maximum terms such as 15 years to life, but received a definite sentence of 8 to 20 years (Correctional Association, 2009[b]; Gibney & Davidson, 2010). The reforms of 2004 and 2005 however did not allow for judges to

exercise discretions during sentencing. Judges were bounded by the established mandatory minimum sentencing policies and could not consider factors such as drug use history relating to the offense. The ability to exercise judicial discretion would allow judges to offer defendants alternative sentencing options such as drug treatment.

In April 2009 New York State governor, David Paterson, signed into law reforms to the 1973 Rockefeller Drug Laws that went further than the reforms of 2004 and 2005. The 2009 reform included elimination of the mandatory minimum sentencing for most drug offenses and now included judicial discretion. The 2009 reform called for the expansion of Alternative-to-Incarceration (ATI) programs including the expansion of drug treatment courts, and also allowed for approximately 1,500 inmates to petition the judicial system for re-sentencing under the new sentencing guidelines (Drug Policy Alliance, 2009[b]).

Elimination of Mandatory Minimum Sentencing

The 2009 reform eliminated the mandatory minimum sentencing guidelines for defendants facing a first-time conviction of a Class B, C, D, or E drug felony. Mandatory prison terms were also eliminated for defendants convicted for second time of a Class B, C, D or E drug felony. Prior to the 2009 reforms defendants faced a mandatory prison term of 15 years for sale or possession of narcotics. For those convicted of a Class B felony, and drug use played a role in committing the crime, defendants are eligible for probation, drug treatment, or a determined prison term. An important aspect of the reform restored judicial discretion allowing judges to make decisions outside of the mandatory minimum sentencing guidelines. Judges can now make decisions to mandate

defendants to drug treatment programs, offer probation, or impose a lesser prison sentence rather than a prison term of 15 years to life.

The Rockefeller Drug Laws reform of 2009 signed by Governor Paterson however, did not change all aspects of the mandatory minimum sentencing guidelines. The reform did not eliminate mandatory sentencing for second time Class B drug felony for defendants with a violent felony conviction within the past 10 years. The reform also did not eliminate mandatory sentences for Class A-I offenses, which is the sale of two ounces or possession of eight ounces of narcotics; and A-II offenses, which is the sale of half ounce or possession of four ounces of drugs (Correctional Association, 2009[b]). With no changes to the mandatory minimum sentencing guidelines for Class A-I and A-II felonies, there were also no changes to judicial discretions. Judges do not have the ability to offer alternate sentencing recommendations for repeat convictions on Class B violent felonies or Class A-I and A-II felonies (Drug Policy Alliance, 2009[b]).

Expansion of Alternative-to-Incarceration Programs

The Rockefeller Drug Laws reforms of 2009 allowed for the expansion of ATI programs including the expansion of drug treatment courts. New York State legislature can now expand ATI programs by investing approximately $71 million to ensure defendants facing drug charges are offered alternatives such as drug treatment (Drug Policy Alliance, 2009[b]). The expansion of ATI programs and drug treatment courts would allow New York State Office of Alcoholism and Drug abuse (NYS OASAS) to coordinated services with various New York agencies and Drug Courts to provide drug treatment from OASAS-certified drug treatment providers. New York State OASAS has been working with criminal justice agencies since 1995, and since then have witnessed an

increase in criminal justice clients entering outpatient drug programs from 40% in 1995 to 53% from in 2009, and an entry increase in residential programs from 46% in 1995 to 61% in 2009 (www.oasas.state.ny.us/cj/index.cfm).

Re-sentencing

As of October 7, 2009 there were approximately 1,500 inmates eligible for re-sentencing under the new Rockefeller Drug Laws sentencing reform guidelines (Drug Policy Alliance, 2009[b]; Gibney & Davidson, 2010). Inmates who were convicted and sentenced for a Class B drug felony prior to 2005 and are currently serving an indeterminate sentence, can now petition the courts to be re-sentenced under the new sentencing guidelines. Inmates can petition for re-sentencing under a lesser charge which includes Class C, D, or E felony which carries less prison time (Gibney & Davidson, 2010). See Table 1 Drug Control Policy Timeline.

Table 1

Drug Control Policy Timeline

Year	Policy	Purpose
1906	Pure Food and Drug Act	Requires accurate labeling of ingredients in patent medicine and tonics
1909	Smoking Opium Exclusion Act	Bans the importation of opium for non-medical purpose
1914	Harrison Act	Controls marketing opium and morphine and limit quantities used in products
1951	Boggs Act	Mandates prison sentences for sale and possession of heroin and cocaine 1st offense 2—5 years 2nd offense 5—10 years 3rd offense 10—15 years

Table 1 (cont)

1956	Narcotics Control Act	Increases the minimum sentence from the Boggs Act 1st offense 5—10 years 2nd offense 10—20 years 3rd offense 20 years—life
1973	Rockefeller Drug Laws	Increases minimum sentence of 15—25 years to life for possession or sale for 4 oz of narcotics
1986	Anti-Drug Abuse Act	Mandates minimum of 5 years for possession of 5grams of crack cocaine
1988	Anti-Drug Abuse Act	Establishes death penalties for drug-related murders Establishes Office of National Drug Control Policy
2004/2005	Rockefeller Drug Law Reform	Changes sentencing from indeterminate to determinate
2009	Rockefeller Drug Law Reform	Eliminates mandatory prison sentence for most drug offenses Restores judicial discretions Expands ATI program and Drug Courts Allows for re-sentencing under new sentencing structure

Social and Economic Impact of Present-Day Sanctions

The social impacts from present-day punitive sanctions, such as the Rockefeller Drug Laws and the Anti-Drug Abuse Acts of 1986 and 1988, have resulted in increased arrests, and convictions, and lengthier prison sentences. These impacts also resulted in personal damages to the drug abuser and the family unit. The economic impacts include increased cost to the judicial system, more productivity loss, and huge healthcare costs.

Social Impact

Increased Arrests

The war on drugs throughout the U.S. has been fought predominately through punitive measures using sanction-orientated approaches to deter drug use (King, 2008). The "war", however, was redefined by the former President Ronald Reagan's administration during the 1980s at the height of the crack cocaine epidemic. It called for severe punishments to deter drug activities. This ushered in increased funding for law enforcement efforts both at the State and Federal levels, creating a shift in combating drug activities. The increased funding to state and local law enforcement made it possible to assign additional police officers to focus on drug law violations. At the local level, increased law enforcement efforts meant increased police presence in neighborhoods, particularly those heavily populated by minorities (Mauer & King, 2007[b]; The Sentencing Project, 2009[b]). Drug activities in minority communities are usually more noticeable resulting in easy arrests, whereas in white communities, these activities take place behind closed doors in places such as homes and offices (Correctional Association, 2008). This new policing activity resulted in a disproportionate number of low-level street drug dealers being arrested and incarcerated.

Drug sales, possession, and distribution accounted for one of the largest increases in arrests. The proportion of arrests for drug violations climbed from one in 14 to one in eight between 1987 and 2005 (Mauer & King 2007[b]). In 2005, four out of five arrests (81.7%) were for possession and one out of five (18.3%) were for sales (Center on Addiction and Substance Abuse [CASA] 1998; Mauer & King, 2007[a]). Nation-wide, drug arrest rates increased 218% from 581,000 in 1980 to more than 1.8 million in 2008 (King, 2008). In a longitudinal study of drug arrests by race in 43 of the nation's largest cities, King (2008) reported that between 1980 and 2003 the arrest rate for Blacks

multiplied at more than three times the rate for whites, 225% compared to 70%. In 1980, 684 Blacks were arrested for drug offenses compared to 387 Whites. However, as law enforcement efforts gathered momentum, 2,221 Blacks compared to 658 Whites were arrested for drug-related offenses in 2003 (King, 2008). King (2008), noted that while there are no data to indicate that Black rates of drug use or selling rose significantly more than white rates during the 1980-2003 period, the disparity, can be attributed to policing practices and city-level policies.

In New York State, policing tactics such as "stop and frisk", which is the law enforcement technique of effecting a "stop"—"where a person is temporarily detained on the street against his or her will for purposes of questioning" contributed to increased drug-related arrests (Office of the Attorney General [OAG], 1999 (pp.1)). The New York OAG conducted an analysis of the New York City Police Department's "stop and frisk" practices by reviewing 175,000 encounters during a 15-month period. The analysis found Blacks were six times more likely to be "stopped" than Whites, and Hispanics were four times more likely to be "stopped" than Whites. The report also noted that Blacks made up 25.5% and Hispanics made up 23.7% of New York City population, however, of those "stopped" 50.6% were Blacks and 33% were White, compared to Whites who comprise 43.4% of the City, but accounted for only 12.9% of all "stops" (OAG, 1999).

Increased Convictions

The introduction of stiffer penalties created a shift in the ratio of individuals convicted of drug charges. In 1982, one in five defendants faced a drug charge but by 2004 the ratio decreased to one in three (Mauer & King, 2007[a]). With more law enforcements accompanied by tougher prosecutorial policies and restrictions on plea-

bargaining, drug offenders were more likely to be convicted and sentenced to prison than they were several years prior (CASA, 1998). A report by Bonczar (2003) noted the prison population jumped to 3.8 million by 2001, with Blacks experiencing the greatest increase compared to Whites and Hispanics. From 1964 till 2001, the percentage of Black males in State and Federal prison moved from 8.7% to 16.6%, Hispanics surged from 2.3% to 7.7%, while the percentage for White males increased from 1.3% to 2.7%. This disproportionate increase among Blacks compared to Hispanics and Whites created a racial disparity within the prison system. According to the Sentencing Project (2009[b]), "racial disparity in the criminal justice system exists when the proportion of racial or ethnic groups in the control of the system is greater than the proportion of such groups in the general population (pp. 1)." One in six Black male has been incarcerated since 2001, and if this rate continues, one in three Black men born today can expect to spend time in prison during their lifetime (Bonczar, 2003).

The increased conviction rates also resulted from the prosecution-level that drug offenders faced. Drug offenders can be prosecuted at the federal or state level depending on the drug charge. State prosecutors will often transfer cases to federal prosecutors in order for defendants to face stiffer penalties (CASA, 1998). This practice resulted in more state court convictions from 41% to 48%, while convictions in federal courts went from 74% to 84% between 1988 and 1994 (CASA, 1998). The greater conviction rate for minorities is also attributed to the fact that Whites have better resources for legal assistance to reduce the likelihood of conviction and incarceration. According to a report by the Correctional Association of New York (2008), White middle- and upper-class

people have political influences and means to afford well-paid, high power attorneys who can successfully avert punishment that could result in any kind of incarceration.

Lengthier Prison Sentences

Convicted offenders now face lengthier prison sentences that are not equal to the crime due to mandatory minimum sentencing and truth-in-sentencing guidelines (Ditton & Wilson, 1999). The mandatory minimum sentence guidelines remove judges' discretion in considering factors relevant to the offender or the offense during the sentencing process. Judges cannot consider factors such as the offender's role, motivation, or the likelihood of re-offending when delivering a sentence;judges must impose the established minimum sentence for the drug offense (Mauer & King, 2007[a]). The truth-in-sentencing "requires offenders to serve a substantial portion of their prison sentence and reduce the discrepancy between imposed and actual time served in prison; and parole eligibility and good-time credits are restricted or eliminated" (Ditton & Wilson, 1999). The truth-in-sentencing legislation requires that convicted offenders must serve time closer to the maximum prison sentence rather than the minimum before being considered for parole. For example, a convicted offender with a prison sentence of seven to nine years cannot serve six years of the sentence before being considered for parole (Ditton & Wilson, 1999). As a result of the truth-in-sentencing guidelines, state prison population saw an increased of 7% from 689,577 in 1990 to 1,100,850 in 1997, with drug offenders accounting for approximately 19% of the growth (Ditton & Wilson, 1999).

The established sentencing guidelines for drug offenses have resulted in racial inequities in the number of Blacks and Hispanics currently in jail. In 2006, 82% of those sentenced under Federal crack cocaine laws were Blacks, whereas only 8.8% were White,

although more than two thirds of those who use crack cocaine are Whites (DPAN, 2009[a]). A report by Mauer & King (2007[a]) noted offenders released from prison in 1986 who were sentenced before the adoption of mandatory sentences served an average of 22 months in prison; whereas offenders sentenced in 2004, after the adoption of mandatory sentences, served almost three times that length, or 62 months in prison.

Personal Damages

The arrests, convictions, and lengthier prison sentences have resulted in personal damages affecting drug offenders. Drug-related detentions and convictions affect the drug offender in areas such as housing, education, entitlement benefits, parental rights, and voting rights.

Drug-related arrests affect the drug offender by making him or her ineligible for federal subsidized housing (Caulkins, 2005). In 1996 and 1998, federal laws permitted public housing agencies to deny housing to anyone involved in "any drug-related activities" (Mauer, 2003). After the passing of this federal law, applicants denied housing due a criminal background increased from 9,835to 19,405 (Mauer, 2003).

Another area of personal impact is ineligibility for student loans. In 1994, President Bill Clinton signed the Violent Crime Control and Law Enforcement Act, banning inmates from receiving tuition assistance from the federally funded Pell Grant Program (Correctional Association, 2007). This prevented inmates from pursuing any form of higher education that might increase their marketable skills following release from prison. A 1998 amendment to the Higher Education Act also suspended eligibility for student loans for anyone convicted of a drug offense, and as a result, approximately 9,000 individuals were ineligible during the 2000-2001 academic year (Mauer, 2003).

Another area of great personal set back due to conviction is the loss of entitlement benefits such as food stamps and cash benefits. The 1996 Personal Responsibility and Work Opportunity Act (PRWOA), passed by Congress as part of welfare reform, placed a lifetime ban on receipt of food stamps and cash assistance for anyone with a felony drug offense. Currently, there are 42 states with partial or full ban on receiving food stamps and cash assistance (Allard, 2002). For drug offenders re-entering society, this ban makes it difficult to contribute to their household in any meaningful way without the financial assistance.

Loss of parental rights also occurs as a result of drug convictions. An incarcerated parent, who might be the primary caretaker, is at risk of loosing his or her parental rights if the child is placed in foster care for an extended period. In New York City, the Administration for Children Services (ACS) passed the Adoption and Safe Families Act in 1997, making it possible for ACS to move towards termination of parental rights if a child has been in foster care for 15 or more months of the previous 22 months (www.nyc.gov/html/acs/html/about/history.shtml). If convicted under the Rockefeller Drug Laws, the parent might likely face 15 years or more resulting in termination of parental rights.

Felony convictions have also stripped many Americans of their basic right as a citizen—the right to vote. Drug offenders with felony convictions face voting restrictions or loss of rights. Currently, voter eligibility for federal elections varies across states from no restriction to permanently denying voting rights. A report by the Sentencing Project (2009[c]) estimates there are 5.3 million Americans (1 in 41 adults) who have lost the right to vote due to a felony conviction. While the Sentencing Project report did not separate

felony convictions by crime to reflect drug convictions, the punitive and aggressive nature of dealing with drug offenders makes it more likely that an individual would receive a felony drug conviction for a drug related offense resulting in the loss of the right to vote.

These personal damages have far-reaching consequences for drug offenders re-entering their society. They are faced with challenges such as no housing or inadequate housing options due to being ineligible for housing subsidies or welfare cash benefits that could serve rent supplements; underemployment because they are unable to increase their marketability due to being ineligible for education loans; and finally, they are faced with the risk of losing both parental and voting rights.

Economic Impact

Drug abuse has a far-reaching impact beyond the individual drug offender. Its effect is felt in the criminal justice, economic, and healthcare sectors of society, each resulting in significant financial loss. As noted earlier, illegal drug are a $60 billion-per-year industry where much of the associated financial loss falling to taxpayers (Harwood et al., 1999; RAND 2005)

Criminal Justice Cost

Drug offenders account for almost a quarter of all State and more than half of the Federal prison population (ONDCP, 2004). The ONDCP indicates that of the approximately 6.3 million adults, drug offenders account for 21% of all State and 59% of all Federal prisoner population. The impact on the criminal justice system has resulted in a large increase in the number of drug-related arrests (Belenko, 1990). A 2002 survey of inmates in local jails by the Bureau of Justice Statistic (BJS) found that more than two

thirds were dependent on or abused alcohol or drugs (Karberg & James, 2005). The estimated number of re-arrests for drug use violations has also been on the increase. The United States Department of Justice (USDOJ) (2005) reported two thirds of drug offenders leaving State prisons are re-arrested within three years. For those on probation or parole, drugs and alcohol are often major factors contributing to their original crimes and frequently the cause of violations resulting in re-arrests (Lang & Belenko, 2000). The financial costs associated with the criminal justice systems include police services, legal adjudications, and correctional services. A report from the ONDCP (2004) indicated police and adjudication services cost an estimated $12.1 billion in 2002, whereas correctional services cost $39 billion in 2002. In addition to adjudication costs, there are costs associated with prison construction to accommodate the increasing prison population.

In New York State, the Correctional Association of New York (2008) reports that there are 13,400 drug offenders incarcerated in State prisons, reflecting a steady rise in the number of nonviolent drug offenses from 5,675 sentenced in 2004 compared to 6,148 in 2007. Of all drug offenders in New York State prisons approximately 80% were never convicted of a violent felony and 52% were incarcerated with three of the lowest level felonies, i.e. Class C, D, or E—which involve very small amounts of drugs (Correctional Association, 2008). Incarceration of non-violent drug offenders cost in New York State prisons cost $36,835per inmate annually (Correctional Association, 2008).

Productivity

Labor productivity is ratio of output to the input of labor (Saari, 2006). Productivity loss is brought about by a reduction in the supply and effectiveness of the

labor force. When drug use impairs workers, it reduces the size of the workforce and, therefore, the size of labor productivity. Drug-related premature deaths, illness, institutionalization, crime careers, and victims of crime affect the supply and effectiveness of the labor force (Harwood et al., 1999). There is a great deal of loss when drug abusers suffer from impaired function, or are incarcerated. In 2002, there were 116,000 institutionalized or hospitalized drug abusers temporarily out of the labor force costing an estimated $2 billion productivity loss. Drug abusers often resort to illegal activities such as drug dealing, property crimes, or prostitution to support their drug habits. In 2002, $27.6 billion was generated by to crime careers, an increase from $19.2 billion in 1992 (ONDCP, 2004). Such practices create more victims. In 2002, there were 5.2 million drug abuse-related victimizations resulting in $1.8 billon loss in productivity due to taking time off from work to recover or to get affairs in order (ONDCP, 2004).

Healthcare Cost

Healthcare costs related with drug abuse increased by 4.1% over a 10-year period from $10.6 million in 1992 to $15.8 million in 2002 (ONDCP, 2004). This jump represents incidence of drug treatment and drug-related medical consequences such as drug-exposed infants, Hepatitis, and HIV/AIDS. In 2002, the total budget for community drug treatment programs was $6 million, an increase of 5% from $3.8 million in 1992. Drug abuse-related healthcare costs such as drug-exposed infants totaled $605 million in 2002, an increase from $407 million in 1992. The cost to the healthcare system due to drug use and the resulting infectious diseases such as tuberculosis is $19 million, HIV/AIDS is $3.7 million, and Hepatitis B and C is $312 million (ONDCP, 2004).

Drug treatment and the Criminal Justice System

While judicial sanctions were a high priority, they did little to deter drug use. Recognition that drug problems were not "curable" by punitive measures led to the consideration of alternate views of drug abuse (Belenko, 2000). The growth of the prison population resulting from convictions under punitive policies, spurred the need for alternative approaches to drug use rather than incarceration (Belenko, 2000). The treatment for drug offenders requires alternative measures other than incarceration.

Early acknowledgement of alternative measures began with programs such as the Narcotic Farms in the 1930s and Civil Commitment Programs in the 1960s as a result of criticisms from the medical profession. The medical profession believed that punitive measures were not effective in deterring drug use or helping those addicted and called for alternative approaches to helping those with drug addiction (Belenko, 2000). By the late 1960s, the Narcotic Addict Rehabilitation Act (NARA) led to the establishment of Federal programs such as Treatment Accountability for Safer Communities (TASC formerly know as Treatment Alternative to Street Crimes) and other Alternative to Incarceration (ATI) programs that created the link between the criminal justice system and the healthcare sector. The following section provides an overview on the development of treatment alternatives for drug-abusing offenders.

Treatment Alternatives for Drug-Abusing Offenders

Narcotic Farms

In an attempt to deal with overcrowding prisons due to arrest among heroin users, specialized Federal narcotic treatment programs were designed to treat users while providing relief to the overcrowded prisons. The first narcotic program opened in 1935

in Lexington, Kentucky, as a U.S Public Health Service hospital, and three years later (1938) another in Forth Worth, Texas (Akers, 1991). The benefits gained by creating the narcotic programs included keeping custody of criminal drug abusers for a longer period, which meant keeping them from the public; relieving the over crowdedness in prisons; and avoiding the cost of creating more Federal prisons (Belenko, 2000; Leukefeld & Tims, 1988; Platt, Burhringer, Kaplan, Brown, & Taube, 1988).

Rehabilitation efforts by both programs generally involved group psychotherapy to bring about positive and pro-social behaviors in its clients (Brown, 1990). The rehabilitation efforts, however, produced little success then. There were high relapse rates and abstinence was not usually long term (Belenko, 2000). The relapses were due to residents leaving at the end of their sentence despite not being fully rehabilitated; and those who were admitted voluntarily left prior to fully completing the treatment process. The Lexington and Forth Worth programs marked the beginning of civil commitment and referrals of drug abusers to drug treatment by the criminal justice system.

Civil Commitment Programs

Civil commitment programs were established in 1961 in California (Civil Addict Program, CAP) and 1966 in New York (Civil Commitment Program, CCP), following the directives of the narcotics programs by committing drug abusers arrested for drug-related acts to treatment while providing protection to society (Inciardi, 1996; Maddux, 1988). These programs controlled and rehabilitated drug abusers through drug treatment, monitoring drug use, and implementing sanctions for program infractions (Leukefeld & Tims, 1988). The CAP and CCP were very stringent; requiring drug abusers to spend an average of 18 months in the inpatient phase followed by outpatient or aftercare closely

monitored in an effort to keep them drug-free (Anglin, 1988). Those in the program were also subjected to three years of community supervision, during which time random urine tests were conducted (Akers, 1991).

The CAP program was effective in reducing daily narcotic use and associated property crimes according to studies by Anglin (1988). Evaluation studies revealed treatment participants demonstrated immediate and dramatic decrease in daily narcotic use that was sustained over a five-year period while under legal supervision. The CAP program was also credited for a reduction in drug-related antisocial behaviors and an increase in employment activities. The effective components of CAP included not only the time spent in drug treatment but, also the close community legal supervision with objective drug testing (Anglin, 1988). The CCP program demonstrated some effectiveness in reducing narcotic use but was not as effective due to operations established by a State agency rather than an agency with experience in dealing with addicts and addicted behaviors (Anglin, 1988). Both civil commitment programs were later de-emphasized due to high operating costs and community-based drug treatment programs were considered more economical than state operated programs. This de-emphasis led to the development of the Federal Narcotic Addict Rehabilitation Act (NARA) in 1966 (Anglin, 1988).

Narcotic Addict Rehabilitation Act (NARA)

The Narcotic Addict Rehabilitation Act (NARA) was established in 1966 in a continued effort to disrupt the drug use/criminal activity cycle. NARA was developed not only to rehabilitate drug abusers but also to provide aftercare services in their communities through linkages with healthcare and criminal justice systems (De Leon,

1988). Drug abusers committed to drug treatment were required to participate in aftercare services and were monitored by the criminal justice system for compliance. NARA established a close linkage between the health care and criminal justice system and included aftercare services, signaling the beginning of an alliance between correctional programs operated by the U.S. Bureau of Prisons and community treatment providers (Weiner, 1976). By the end of 1972, there were 68 NARA supported community-based treatment programs (Anglin, 1988; Anglin & Hser, 1990[a]). Their encouraging developments led to new coordinated efforts to identify alternative means to deal with criminal justice drug abusers.

The major efforts of NARA at the Federal level, with its linkage between healthcare and the criminal justice system, the pressures of recidivism, and the financial cost exerted by drug-abusing offenders, induced the development of ATI programs, also referred to as Diversion programs, to target these offenders (Harvard Law Review, 1998). The primary function of ATI programs is to identify individuals involved with the criminal justice system due to drug abuse and, based on comprehensive assessments provide, a referral for the appropriate level of drug treatment. ATI programs delay prosecution by dismissing or postponing criminal charges on the condition that drug-abusing offenders participate in drug treatment for a predetermined length of time in lieu of a potential sentence (Gostin, 1991).

Treatment Accountability for Safer Communities (TASC)

Developed with Federal funds in 1970, Treatment Accountability for Safer Communities (TASC) identifies those who might become progressively involved with the criminal justice system due to their drug use, refer them to treatment, and monitor their

adjustment to society (Cook & Weinman, 1988). TASC offers a system to track the treatment progress of drug-abusing offenders and to act as liaison between courts and independent drug treatment programs. TASC uses a case management approach and employs legal sanctions that reflect community concerns for public safety. It also utilizes treatment that emphasizes therapeutic relationships as the means of changing behaviors and reducing drug use.

Today, there are 40 states with TASC programs in operation with a strong statewide presence in states such as Florida, New York, Delaware, Ohio, Pennsylvania, and Illinois (TASC, n.d.). Early evaluations of TASC programs concluded they are generally effective at identifying drug abuse problems among offenders and making appropriate treatment referrals. In a national study, TASC clients in residential (48%) and outpatient (57%) programs were more likely to complete a three-month threshold of treatment compared to clients with no legal involvement in residential (30%) and outpatient (41%) programs (Hubbard, Collins, Rachal, & Cavanaugh, 1988). TASC clients demonstrate greater retention and better post-treatment success than non-TASC clients (Inciardi & McBride, 1991). Consistent results were found by Anglin, Longshore, and Turner (1999) among TASC clients who had greater reduction rates in drug-use days, frequency of drug use, and number of drugs used compared to noncriminal justice clients.

Drug Courts

The groundbreaking ATI program for drug offenders is the drug court because of its potential for improving public safety and public health (National Institute of Justice, 2006). The first drug court program was established in 1989 in Dade County, Florida in

response to the colossal number of drug-related cases and expanding prison population (Belenko & Dumanovksy, 1993).

Drug courts are designed to use its authority to reduce crime by changing defendants' drug abuse behaviors. Under this concept, in exchange for likely dismissed charges or reduced sentences, defendants are diverted to participate in judicially monitored drug treatment programs. Like the ATI programs, drug courts integrate drug treatment services into the justice structure and provide continual monitoring through regular drug testing (Belenko, 1998). Judges oversee the treatment of drug-abusing offenders through frequent court appearances; review their progress in the treatment program, and a combination of praise for positive behavior and sanctions for treatment failures to encourage offenders to complete treatment successfully (Harvard Law Review, 1998). The judge is the central figure in a team effort that focuses on sobriety and accountability as the primary goal. Because the judge takes on the role of trying to keep participants engaged in drug treatment, providers can effectively focus on developing a therapeutic relationship with the client. In turn, treatment providers keep the courts informed of each participant's progress so that rewards and sanctions can be provided (National Association of Drug Court Professionals, 1997).

In a meta-analysis of evaluation studies on drug courts, Belenko (1998) concluded drug courts performed successfully in retaining offenders with substantial drug and criminal histories and minimal prior treatment engagement. Drug use and criminal behaviors are reduced substantially while clients participate in drug court programs. Savings are generated from reduced prison use, decreased criminal activities, and lower criminal justice-related costs. Drug courts have multiplied nationwide as key

components to the criminal justice system since their initial opening in 1989. To date, they number 2,174 (ONDCP, 2009).

Drug Treatment Alternative to Prison (DTAP)

In 1990 the Drug Treatment Alternative to Prison (DTAP) program, unique to New York, was developed by the Brooklyn District Attorney's office as the first prosecution-run program in the country, to divert nonviolent felony drug offenders to residential drug treatment. DTAP was developed in response to the crack epidemic, on the premise that defendants would return to society as drug-free and productive citizens following treatment than if they spent comparable time in prison at nearly twice the cost (Brooklyn DA, 2007). Defendants who qualify would enter a felony plea and receive a deferred sentence allowing them to participate in residential drug treatment program for a period of 18 to 24 months (Hynes & Swern, 2005). DTAP participants are offenders who have repeatedly sold drugs, have not been convicted of a violent crime, are willing to engage in treatment and community living, do not have a history of violence or severe mental disorder, and are facing a mandatory prison sentence under New York State's second felony offender law (CASA, 2003).

Since its inception, more than 1,155 drug offenders have completed the program (CASA, 2003). A five-year evaluative study by CASA (2003) compared a sample of 280 DTAP participants to a matched sample of 130 similar offenders who passed through the regular criminal justice process. Results revealed DTAP participants who successfully graduated the program have a 33% lower re-arrest rate; a 45% lower reconviction rates; and an 87% lower prison re-incarceration rates than the comparison group. Results also indicate DTAP graduates are three and one-half times more likely to be employed than they

were before their arrest; remain in treatment six times longer; and have a 81% one-year retention rate by remaining in treatment for at least 12 months. The success rate of the DTAP program has to do with its model. All participants sign a participation agreement in court that outlines treatment requirements and the consequences for failure. DTAP dropouts face mandatory incarceration and longer prison sentences due to their repeat felony offender status. DTAP also requires monthly progress report from the drug treatment staff, and it has its own specialized warrant team to pursue absconders (Young, 2002). TASC, unlike DTAP, is much more likely to offer failed participants a second chance and place them in another drug treatment program (Young, 2002). See Table 2 for ATI programs.

Table 2

Alternative-to-Incarceration Programs

Year	Alternative Approaches
1935	Narcotic Farm in Lexington, Kentucky
1938	Narcotic Farm in Forth Worth, Texas
1961	California Civil Addict Program
1966	New York Civil Commitment Program
1972	Treatment Alternative to Street Crimes (TASC)
1989	Drug Court
1990	Drug Treatment Alternative to Prison (DTAP)

Drug Treatment Modalities

Treatment for drug abuse is delivered in many different settings. There are more than 11,000 specialized drug treatment facilities providing rehabilitation throughout the U.S (National Institute on Drug Abuse (NIDA), 2000). Drug treatment modalities can vary to include those such as long-term residential, short-term residential, or drug-free outpatient. The criminal justice system tends to use both long-term residential and drug-free outpatient programs (Hiller, Knight, Broome, & Simpson, 1998). The choice for these programs varies from client to client needs to the nature of the criminal offense that might require constant supervision. For example, a residential program will make sure that the client is monitored constantly and the justice program will be notified if the client leaves prematurely.

Residential Drug Treatment Programs

Residential drug treatment programs are not only cost effective and provide greater monitoring and control of criminal justice clients, but they also provide opportunities for clients to be involved with the community and make use of support systems to assist in the recovery process (Dynia & Sung, 2000). Residential treatment programs are based on the therapeutic community (TC) model, a modality incorporating social learning. Therapeutic community programs are fashioned after peer support for pro-social values and behaviors, and a holistic perspective to human change (Hartman, Wolk, Johnston, & Cloyer, 1997; Lipton, 1998). Traditionally, the length of time in a TC varies from 18 to 24 months. However, recent funding changes have forced many programs to shorten stays anywhere from 9 months to 12 months. Treatment within a TC is divided into three major phases: Phase one is introduction and early treatment; Phase two is primary treatment; and Phase three is re-entry (NIDA, 2002).

Phase one—induction and early treatment, occurs during the first 30 days of treatment. During this time clients learn the TC policies and procedures; establish trust with staff and other residents; and initiate an assisted personal assessment of self, circumstances, and needs (NIDA, 2002). This stage also allows clients to begin to understand the nature of addiction, and allows them to begin to commit to the recovery process.

Phase two—primary treatment, which is two to three months, provides a structured model of progression though increasing levels of pro-social attitudes, behaviors, and responsibilities. The treatment program may use interventions, such as cognitive behavioral therapy and motivational interviewing, to change clients' attitude, perception, and behavior related to drug use. The TC also addresses social, vocational, familial, and psychological needs of the client.

Phase three—re-entry, which is generally from four to six months, is intended to facilitate the client's separation from the treatment environment and gradual transition to the community. To ensure continued abstinence, aftercare services are often recommended which may include individual or family counseling, participation in an outpatient drug program for a minimum of three month, or attending self-help groups such as Narcotics Anonymous (NA) or Alcoholic Anonymous (AA) (NIDA, 2002).

Short-term Residential Drug Treatment Programs

Short-term residential programs that are staffed by medical professionals, to provide intensive but brief residential treatment, designed to keep clients for up to 30 days with a focus on medical stabilization and abstinence (Muller & Wyman, 1996). Originally designed to treat alcohol problems, short-term residential programs began treating other

substances during the mid-1980s with the emergence of the crack cocaine epidemic (NIDA, 2000). Clients who complete short-term residential treatments are often referred to drug-free outpatient programs to continue the recovery process.

Drug-free Outpatient Programs

The drug-free outpatient program is the other commonly used treatment modalities by the criminal justice system (Farabee & Leukefeld, 2001). Drug-free outpatient programs cost less than residential TC programs and vary in their intensity and the type of services offered. Unlike residential treatment, drug-free outpatient programs do not follow the same three phases of treatment. Rather, they focus primarily on promoting behavioral changes through individual, group, and family therapy sessions (NIDA, 2002). These therapy sessions concentrate on problem solving, cognitive behavioral approaches, and incorporating the self-help programs such as NA or AA. The length of participation in drug-free outpatient treatment varies from 6 months to 12 months with urine testing for drug use carried out more frequently than in residential programs. Drug-free outpatient programs are often used as an aftercare component for those completing residential drug treatment programs.

Implications and Significance for the Social Work Field

The social and economic impacts discussed earlier have implications for the social work field. The impacts from the punitive drug laws prompted advocacy work for alternative approaches for dealing with drug-abusing offenders. Advocates for alternative approaches to incarceration see reduced costs associated with criminal justice proceedings, promotion of pro-social behaviors, and minimized impacts on family units (Farabee & Leukefeld, 2001; Polcin, 2001; Mauer, 2009[c]).

Implications for Social Work

Advocacy

Continued incarceration has led to advocacy for changes in current drug laws, sentencing policies, and the need for alternatives to incarceration programs. Advocacy efforts led to the recent repealing of the Rockefeller Drug Laws in April 2009 when then NYS Governor David A. Paterson signed the Rockefeller Drug Laws reform (Governor Press Releases, 2009). This reform provided changes in three major areas: (1) it eliminates the mandatory minimum prison sentence for most drug offenses; (2) it expands ATI options; and (3) it allows for retroactive sentencing for those currently incarcerated (DPAN, 2009[b]). First, the reform eliminates the mandatory prison sentencing for first-time drug offenders convicted of a Class B, C, D, and E drug felony. Prison sentence was also eliminated for second time offenders convicted of a Class C, D, and E drug felony. Judges now have the discretion to sentence first- and second-time drug offenders to probation, drug treatment, or some other form of ATI program. As discussed earlier in the chapter, currently there are 13,000 drug offenders in N.Y. state prison system under the Rockefeller Drug Laws where 52% of them are incarcerated with the three lowest level felonies, Class C, D, and E (Correctional Association, 2008; www.droptherock.org). Repealing the Rockefeller Drug Laws is an important milestone because it provides cost-effective alternatives to dealing with drug-abusing offenders.

Second, the reform calls for the expansion of ATI programs, re-entry services, and expansion of drug courts for drug-abusing offenders (DPAN, 2009[b]). The cost of incarcerating drug-abusing offenders in N.Y is $36,835 per person annually, whereas, drug treatment options cost $2,700-$4,500 per person annually for outpatient and

$17,000-$21,000 per person annually for residential (Correctional Association, 2008). Drug treatment, an ATI option, is important because the offenses committed were often the result of drug dependence and drug-related activities. Drug treatment is a more effective way of treating the dependence and reducing the likelihood of re-offense and re-arrest (Inciardi & McBride, 1991). Drug offenders who participate in treatment for a minimum of 90 days are likely to achieve positive outcomes in the domains of reduced drug use and criminal activities (Anglin, Brecht, & Maddahian, 1989; Anglin & Hser, 1990; Simpson, Joe, & Brown, 1997; Zarkin, Dunlap, Bray, & Wechsberg, 2002). ATI programs also aid efforts to reduce the recidivism rates among drug offenders (Anglin & Maugh, 1992; Lipton, 1998; Wild, Roberts, & Cooper, 2002; Wild, Newton-Taylor, Ogborne, Mann, Erickson, & MacDonald, 2001). Court sanctions place drug offenders in treatment for a predetermined period resulting in greater retention rate in drug treatment, positive treatment outcomes, and favorable behavioral changes (Collins & Allison, 1996; De Leon, 1991).

Finally, the Rockefeller Drug Laws reform resulted in retroactive re-sentencing for drug offenders already serving under this promulgation (DPAN, 2009[b]). As a result of the change, drug offenders convicted of Class B drug felonies before 2005 with sentences greater than three years are able to petition for re-sentencing under the new drug felony sentencing guidelines (DPAN, 2009[b]). This development will allow approximately 1,500 offenders currently incarcerated under the original Rockefeller Drug Laws sentencing guidelines to argue for lesser charges using the new sentencing guidelines (DPAN, 2009[b]). Re-sentencing will allow for early release and/or time served due to the new guidelines.

With the changes to drug laws the implication for social work becomes two-folds, one—working to provide adequate services to those being released from prison to prevent recidivism; and two—identifying resources such as additional funds to offer more ATI programs for those at risk of being incarceration due to drug use. While the re-sentencing guidelines will require additional resources to re-sentence these cases, the associated cost is not equivalent to the current incarceration annual cost of $36,385 per inmate (Correctional Association, 2008).

Clinical Assessments

Clinicians working with drug-abusing offenders must ensure proper clinical assessments because while clinicians might consider drug treatment as a positive ATI option, the drug offender might not be motivated for drug treatment. There are concerns that mandating drug offenders to drug treatment simply places them in the treatment environment but does not promote motivation for change (Farabee, Prendergast, & Anglin, 1998). The concern is that forced treatment will be of little clinical merit because drug-abusing offenders can change only if they are internally motivated to stop using drugs, and those who are not motivated to change their behavior will not be open to therapeutic process (Brecht, Anglin, & Dylan, 2005; Lurigio, 2000; Wild, Newton-Taylor, & Alletto, 1998).

Studies found mandated clients scored significantly lower on treatment motivation when compared to non-mandated criminal justice clients and also found clients mandated to drug treatment were less likely to recognize the need for treatment (Farabee, Nelson, & Spence, 1993; Marshall & Yser, 2002). Research has also demonstrated that lack of internal motivation for change precludes positive treatment

outcomes (Marlowe, Kirby, Bonieskie, Glass, Dodds, Husband, Platt, & Festinger, 1996; O'Hare, 1996). The concerns and arguments against drug treatment as an alternative make it crucial for clinicians to appropriately assess the level of treatment readiness among drug-abusing offenders. Early and appropriate assessments allow clinicians to identify the level of motivation for drug treatment and the proper treatment intervention best suited for drug offenders. Treatment intervention such as Motivational Interviewing is a commonly used technique that enhances and facilitates internal motivation to change (Miller & Rollnick, 2002). This treatment technique seeks to move individuals from a resistant or non-engaging stage to an active participation stage (Miller & Rollnick, 2002).

Appropriate clinical assessments of mandated drug-abusing offenders are also important because of limited resources. Concerns abound that requiring individuals to undergo drug treatment when they are not ready, will utilize limited available drug treatment slots. There are 12,000 long-term residential treatment beds available throughout the United States (Kramer, 1993) and the criminal justice system most often utilized residential treatment because it provides constant supervision and communication regarding drug-abusing offenders. It is important for clinicians to appropriately assess and reassess drug-abusing offenders during the course of treatment to ensure significant progress and minimize the loss of resources. The correct assessment and treatment interventions amount to program performance when working with the criminal justice system. Positive treatment outcomes such as reduction of drug use, reduction in re-arrests, and improved pro-social behaviors, such as employability and drug treatment programs remain competitive when serving criminal justice agencies. Lincourt, Kuettel, and Bomardier (2002) found using motivational interviewing among mandated clients

who were unable to identify treatment goals were significantly more likely to complete their treatment goals, and more likely to complete treatment.

Clinical Services

Drug treatment is being utilized more and more as an ATI measure in an effort to reduce the impact of drug-related cases on the regular judicial system. The criminal justice system has dominated the drug treatment referral process. For example, 40% to 50% of referrals from the criminal justice system are made to drug treatment programs (Farabee & Leukefeld, 2001; McVay, Schiraldi, & Ziedenber, 2004). A 2007 report by the Sentencing Project indicated that, during the past three years there has been a steady increase in ATI programs, including the expansion of drug courts mandating drug offenders to treatment (King, 2007). The expansion of drug courts and increased referrals to drug treatment compels the social work field to keep pace with providing appropriate services. Services other than drug treatment such as vocational, housing, medical, and mental health are also needed for success in meeting legal mandates and minimization of future drug related arrests.

Policy and Research Implications

Social work advocacy promoted new policies to address drug-abusing offenders. Advocacy has led to the changes in the Rockefeller Drug Laws including the sentencing policies and increased alternatives for drug-abusing offenders. These policy changes have resulted into significant cost savings. The Drug and Alcohol Services Information System (DASIS, 2004) reported that between 1992 and 2001, referrals to drug treatment programs increased by 32%. Referrals to the drug treatment programs have affected cost saving benefits for all areas of the criminal justice system. DTAP's 16th annual report

indicated a total cost savings of $38,463,183 from 1990 to 2006 calculated on correction savings, socioeconomic savings, and income taxes paid based on 971 DTAP graduates (Swern, 2007). The cost savings include $29,855,408 in corrections; $987,507 in healthcare; $3,687,159 in public assistance; $3,012,508 in recidivism; and $920,508 in increased income tax contributions (Swern, 2007). The economic cost cuts demonstrate the ability of ATI programs to generate savings not only for the criminal justice system but also for areas such as healthcare and increased tax contributions from former drug abusers. The cost-savings generated through ATI programs also means the expansion of more community-based correction programs. For example, Federal legislation was introduced recently to the 110th Congress in 2007 to expand the DTAP program to other jurisdictions throughout the country.

With more referrals and plans to expand ATI programs, the criminal justice system will continue to enter into contractual agreements with drug treatment providers to treat drug-abusing offenders for the purpose of reducing recidivism and lowering cost associated with this population. Research shows drug offenders who complete drug treatment have reduced post-treatment drug use; are less likely to commit future drug-related crimes; have greater reduction in drug-use days; decreased frequency of drug use and number of drugs used (Anglin, Longshore, & Turner, 1999; Harrison, 2001**;** Wexler, William, Early, & Trotman, 1996). Research also shows a one-year retention rate as high as 68% among criminal justice clients participating in drug treatment that will ensure maximum clinical benefits (Belenko, 1998). Continued work is needed to address several concerns about drug offenders entering treatment programs, that is, they tend to be less

compliant, report less satisfaction with drug treatment, and are often not "ready to participate in drug treatment" (Kelly, Finney, & Moos, 2005).

Summary

Attempts to control drug-abusing offenders through punitive strategies yielded few positive results. Punitive sanctions to control drug-abusing offenders resulted in increased arrests, increased convictions, and lengthier prison sentences (Marlowe, 2003). However, the integrated approaches of public health and public safety have implications for best practices for the social work field. This balanced approach will guarantee a reduced prison population, reduced personal loss that impacts family units, and reduced cost savings for society. Drug treatment has demonstrated its cost effectiveness for the criminal justice system as it deals with drug-abusing offenders (McVay, Schiraldi, & Ziedenber, 2004). Alternative-to-Incarceration programs and other community-based programs are being adopted as policy to servicing drug-abusing offenders. As noted earlier, there were increases in the last three years to divert nonviolent drug offenders from incarceration (King, 2007). With more referrals to drug treatment programs, it is incumbent upon service providers to avail appropriate course of treatment to enable successful clinical outcomes. Resultant successful outcomes begin with sound clinical assessment of drug offenders entering treatment. Assessing drug offenders early in the clinical process contributes to increased positive treatment outcomes.

CHAPTER III

STATEMENT OF RESEARCH

This chapter focuses on the research concepts relevant to this research. After reviewing the background and significance of drug-abusing offenders, this research augments existing knowledge on the alternatives to incarceration population by assessing internal motivation, specifically treatment readiness.

Research Concepts

Substance Abuse

According to the Diagnostic Statistical Manual 4th Edition [DSM-IV], 1994) drug abuse is the maladaptive pattern of substance use that leads to clinically significant impairment that is manifested by one or more of the following occurring within a 12-month period: 1—the recurrent substance use resulting in failure to fulfill major role obligations at work, school, or home; 2—the recurrent substance use in situations in which it is physically hazardous, e.g. driving while impaired; 3—the recurrence of substance-related legal problems; and 4—the recurrent substance use despite persistent or recurrent social or interpersonal problems caused by or exacerbated by the effects of the substances. The term substance abuse and drug abuse have been used interchangeable throughout the literature. For purposes of this research the term drug abuse is used throughout the paper.

Criminal Justice Status

There are varying terms throughout the literature used to describe criminal justice clients and their status in drug treatment programs. Farabee, Prendergast, and Anglin (1998) identified terms such as “coerced,” “compulsory,” “mandated,” “involuntary,”

"legal pressure," or "criminal justice referrals" as some examples. Wallace (2005) defines a mandated client as any individual under correctional supervision and who enters community-based drug treatment after having been referred to treatment by the criminal justice authorities, the individual is under supervision and monitored by a judge or some agency under contract with the judicial system. For purposes of this research Wallace's (2005) definition of mandated client will be used.

Legal Coercion

There are also varying terms throughout the literature used to describe coercion by the criminal justice system. Farabee et al. (1998) noted there are varying degrees of coercion that includes recommendation for drug treatment from a probation or parole officer's to a drug court judge's offer of treatment in lieu of a prison sentence. De Leon (1988) noted that similar terms such as "legal pressure," "legal status," and "legal referral" are also used interchangeably throughout the literature. Farabee et al., (1998) and De Leon (1988) identified and defined three key terms—legal referral, legal status, and legal pressure. They define *legal referral* as anyone referred to drug treatment by diversion programs, probation, parole, or some other specific court sentencing stipulation. *Legal status* is defined as any client with any form of involvement with the criminal justice system ranging from warrants to incarceration. *Legal pressure* is the subjective experience of the client receiving the pressure because those who are legally referred may not experience any discomfort over the consequences of non-compliance with drug treatment. For purposes of this research Farabee et al. (1998) and De Leon (1988) definition of legal referral will be used.

Motivation

Motivation is recognized as a factor in the drug treatment process and is considered central to the course and outcome of drug treatment. It has been broadly defined in explaining why individuals engage in behavior changes and the extent of their desire to do so (Cahill, Adinoff, Hosig, Muller, & Pulliam, 2003; Curry, Wagner, & Grothaus, 1990; Miller, 1985). DiClemente (1999) defines motivation as the causes and intentions that move individuals to adopt certain behaviors, where they pushed or pulled by motivational forces that shape or direct behaviors. These motivational forces can be external or internal. External motivation is defined as outside pressure to change, whereas internal motivation refers to pressure to change that originates from within the individual (De Leon, Melnick, & Tims, 2001). External motivation forces that influence the behavioral change process can originate from a legal, formal, or informal source.

Legal Motivational Forces

Legal motivational forces refer to behavior changes directed by the criminal justice system. Legal motivational forces demonstrate the most potential for influencing behavior toward desired outcomes. This is because it is the most consistent type of coercion and is less subjected to changes than coercion by other informal sources such as ultimatums from family members that might tend to compromise (Gregoire & Burke, 2004). Some evidence suggests that legal forces result not only in greater drug treatment retention but reduced drug use and criminal acts; improved pro-social behaviors such as increased employment; and improved relationships with family and support networks (Condelli & Hubbard, 1994; Etheridge, Craddock, Hubbard, & Rounds-Bryant, 1999; Rempel & DeStefano, 2001; Simpson, Joe, Fletcher, Hubbard, & Anglin, 1999; Zarkin,

Dunlap, Bray, & Wechsberg, 2002). Research also suggests clients entering drug treatment due to legal motivational forces, remain in treatment longer and show post treatment changes such as reduced drug use, recidivism and greater pro-social behaviors (Knight, Hiller, Broome, & Simpson, 2000).

Formal Motivational Forces

Formal motivational forces are institutionalized strategies to facilitate drug treatment entry. Formal motivational forces such as social assistant programs require participation in drug or alcohol treatment programs to prevent loss of government-provided benefits. Agencies such as the U.S. Social Security Administration require individuals identified as drug and alcohol abusers to participate in drug treatment or risk termination of financial benefits (Watkins & Podus, 2000). Brizer, Maslansky, and Galaner (1990) found alcohol dependent public assistance recipients who participated in alcohol treatment, remained in treatment as long as self-referred clients. The other formal motivational forces include employers using constructive coercive strategies to get employees to participate in Employee Assistance Programs (EAP) whose job performance is affected due to drug or alcohol use (Jacobs & Zimmer, 1991; Wild, 2006).

Informal Motivational Forces

Informal motivational forces originate from social contracts with family or social networks where individuals may feel significant pressure to enter drug treatment. The social consequences brought about by family and friends play an integral role in motivating drug treatment entry (Fernandez, Begley, & Marlatt, 2006; Perron & Bright, 2008). They use strategies such as the Johnson Intervention (JI), an intervention carried out by family and friends who confront the drug abuser, with the guidance of a therapist,

to motivate drug treatment entry (Fernandez et al., 2006). Loneck, Garret and Banks (1996) compared three drug treatment referral methods—the JI, coerced (received an ultimatum or suffer specific consequences from job or court), and non-coerced (no ultimatum issued). Their results indicated clients in the JI group were more likely to enter and complete the treatment process than clients in the coerced and non-coerced group. However, while the drug treatment entry is key, what is important to the treatment process is the readiness to engage and participate willingly in drug treatment activities to maintain changes.

Treatment Readiness

External motivational forces are useful in initiating and achieving behavioral changes and keeping clients in drug treatment. However, sustaining the behavioral changes beyond the external contingencies, internal motivation is important to the treatment process. Internal motivation refers to pressure to change that arise from within the individual. These pressures are typically negative self-perception concerning drug abuse and the desire for a more fulfilling lifestyle (De Leon et al., 2001). Both external and internal motivation forces are important to the drug treatment and recovery process. Failure to address both can result in inferior treatment participation and less favorable outcomes (Farabee et al., 1998). Leukefeld and Tims (1988) note that stable recovery cannot be maintained by external pressure alone but that, motivation and commitment from internal motivation must be present.

A key component of internal motivation is readiness for treatment. Broadly defined, readiness is the possession of characteristics by the individual that are likely to promote engagement in the behavioral change process and thereby enhancing changes

(Ward, Day, Howells, & Birgden, 2004). Readiness for drug treatment refers to the perception that treatment is necessary in order to achieve behavioral changes (De Leon and Jainchill, 1986). Treatment readiness involves a willingness and openness therapeutic treatment and preparedness to engage in remedial activities (De Leon, et al., 2001; DiClemente, Schlundt, & Gemmell, 2004). The success of clients in drug treatment depends, in part, on their level of readiness for treatment. Occasionally, clients are not ready to actively participate in treatment activities to promote behavioral change (DiClemente, 1999; DiClemente, Bellino, & Neavins, 1999; Prochaska, DiClemente, & Norcross, 1992).

Determining treatment readiness is key to the recovery process because it allows providers to have a better understanding of whether or not clients are ready to actively commit themselves to the therapeutic process. This understanding enables treatment providers to meet clients where they are in the therapeutic process and, to develop treatment plans accordingly (Joe et al., 1998). Providers will be better prepared to occupy clients in activities to increase or enhance readiness for drug treatment. For example, Motivational Interviewing focuses on enhancing and facilitating the client's own motivation by altering decisions and increasing readiness for change (Miller & Rollnick, 2002). Hiller, Knight, Leukefeld, and Simpson (2002) found clients assessed with low treatment readiness at intake show increased readiness following participation in readiness activities early in the drug treatment process.

Research Questions

It will be shown in the preceding chapters that assessing drug offenders' motivation for treatment early in the clinical process contributes positive treatment

outcomes, reduces drug use, and reduces re-arrest (Joe et al., 1998; De Leon, et al., 2001). The purpose of this research is to assess readiness for drug treatment among drug-abusing offenders mandated to drug treatment. This research will add to existing knowledge on the Alternative-to-Incarceration (ATI) population by addressing the following research questions:

(1) Is there a relationship between treatment readiness and client type?

(2) Is there a relationship between treatment readiness and criminal justice referral type?

(3a) Is there a relationship between treatment readiness and whether clients have drug treatment history?

(3b) Is there a relationship between treatment readiness and whether clients have criminal justice involvement history?

(4) What is the relationship between treatment readiness and client attributes?

These research questions are important as a result of changes drug control policies. There is need for additional research on the alternative to incarcerated population to determine the best way to meet the needs of these clients. This study seeks to contribute to the body of literature and to our understanding of services to mandated clients entering drug treatment programs.

CHAPTER IV

THEORETICAL PERSPECTIVE

There are several theoretical perspectives to understanding changes in addictive behaviors. Several of the perspectives include: cognitive-behavioral, systems, ecological, humanist, and existential perspectives. The cognitive-behavioral theoretical perspective explains changes through processes involved with cognitive restructuring and behavior modification techniques (Beck, Wright, Newman, & Liese, 1993). The system and ecological theoretical perspectives discuss changes occurring not only in the individual but how involvement with various systems such as family, friends, and one's community can affect these changes (Bronfenbrenner, 2005). The humanist and existential theoretical perspectives view changes in behaviors occurring as a result of the relationship between the client and the therapist (Payne, 1997). While these theoretical perspectives attempt to explain changes in behaviors, Prochaska and DiClemente (1982) presents an alternative perspective that incorporates varying aspects of these interpretations into a one known as the Transtheoretical Model of Change (TTM). The TTM brings together divergent perspectives focusing on how individuals change behavior and identifying key dimensions involved in the process of behavioral change. The model offers an integrative framework for understanding and intervening with behavior changes (DiClemente, 2003).

Transtheoretical Model of Change

There are two key organizing constructs to the TTM: the stages of change, which is the dynamic aspects of the process of change over time, and the process of change, which facilitates the movement through the stages of change (DiClemente, 2003).

Stages of Change

The first organizing construct to the TTM is the stages of change. The stages of change represent the dynamic and motivational aspect of change over time. Prochaska and DiClemente (1982) note the stages of change segmented the process into meaningful steps consisting of specific tasks required to achieve and sustain changes. The stages of change are divided into five distinct stages: pre-contemplation, contemplation, preparation, action, and maintenance. Precontemplation is the stage where there are no intentions to change the behavior in the near future or the individual is unaware or under-aware of the problem (DiClemente, et al., 1991). Clients who enter drug treatment as a result of pressure from family, employers, or the criminal justice system are usually identified as pre-contemplators. De Leon et al. (2000) and Farabee et al. (1993) noted mandated clients score lower in assessment areas of drug use, desire for help and readiness for treatment.

Contemplation is the next stage where the problem is recognized and there are serious thoughts about behavior change, but no commitment to take action. It is this stage where individuals evaluate the pros and cons of changing behaviors and evaluating potential new behavior patterns. The contemplation stage requires a "risk-reward analysis" of the addictive behavior and assessing the amount of effort and energy required to overcome the problem (DiClemente, 1991).

The preparation stage is where a plan of action and a determination to implement a plan of change. At the preparation stage, individuals work through the "risk-reward" of making behavior changes and identify a plan of action and commit to changing. The preparation stage is followed by the action stage, which is marked by the implementation

of the change plan for the behavior. At this stage, behaviors and environments are modified in order to overcome difficulties.

The final stage is maintenance, where new behaviors are incorporated as part of the individual's lifestyle to avoid relapse. DiClemente, Carbonari, and Velasquez (1992) indicated individuals must remain free of the addictive behaviors for more than six months to be considered in the maintenance stage. Stabilization of the new behavior and avoiding relapses are the hallmarks of the maintenance stage.

Process of Change

The second construct to the TTM is the process of change. The process of change represents the internal and external experiences and activities that enable individuals to move from one stage to the next (DiClemente, 2003). With regards to the process of change Prochaska and DiClemente describe two broad categories: cognitive/experiential process and behavioral process. The cognitive/experiential process identifies ways of thinking and feeling that create change; and the behavioral process identifies ways of altering behaviors (DiClemente, et al., 1992).

There are five cognitive/experiential processes. They include consciousness-raising, emotional arousal, self-reevaluation, environmental reevaluation, and social liberation. The first process, consciousness-raising, is where individuals gain information that increases awareness about current behaviors. It has been highlighted as a fundamental process for changing behaviors and is a prime target for most prevention and treatment programs (DiClemente, 2003). Clients increase their awareness during the introduction and early phase of treatment where they learn about the dangers of their addiction. The second process, cognitive/experiential, involves emotional arousal that is

considered central to emotion-based theories of change (e.g., Gestalt). In this process, individuals experience a reaction to the old or new behavior to promote change (DiClemente, 2003). These experiences can either enhance the value of the current behavior or decrease the value these behaviors. Self-reevaluation, the third cognitive/experiential process, involves the process of assessing how old or new behaviors fit or conflict with personal values, beliefs, and goals. This type of self-reevaluation is a successful tool to behavior change as it highlights how old addictive behaviors might result in arrest or loss of family. The fourth process, environmental reevaluation, is the process of change where the individual recognizes the positive and negative effects that old or new behaviors had on others. The final cognitive/experiential process is social liberation that involves increasing social alternatives and norms that support the new behavior such as attending self-help groups or avoiding environments that were associated with the old addictive behavior (DiClemente, 2003).

The second broad category in the process of change is the behavioral process of change. There are five behavioral processes of change. They include self-liberation, stimulus control, counter-conditioning, reinforcement management, and helping relationship. The first, self-liberation, involves taking responsibility and making a commitment to change current behaviors and to engage in new ones. Humanistic and existential steps to change emphasize the responsibility and personal choices involved in making behavioral changes. The second behavioral process is stimulus control that requires creating and avoiding cues that can trigger or encourage old behaviors. Stimulus control is coupled with the third behavioral process of change, counter conditioning. Counter conditioning requires making new connections between cues and behaviors.

Individuals can change connections between cues and behavior by increasing or decreasing the number and nature of the stimuli connected to the behavior, or by substituting one behavioral response for another (DiClemente, 2003). The commonly use idiom in drug treatment programs, "people, places, and things," is frequently discussed with clients. Clients learn in group and individual sessions to avoid the people, the places, and the things associated with their drug use that can trigger a relapse. The fourth behavioral process of change is reinforcement management. It involves identifying and controlling the positive and negative motivations for the behavior. The final behavioral process, helping relationship, involves seeking and receiving support from others to support new behaviors (DiClemente, 2003). Clients in drug treatment programs are often encouraged to establish healthy and positive relationships that support their recovery process. They are often encouraged to participate in self-help groups such as Narcotics Anonymous (NA) or Alcoholic Anonymous (AA). As part of the process they are encourage to identify a sponsor—an individual who is well established in their own recovery and can serves as a guide and source of support for the client as they go through the 12-steps of NA or AA.

Application of the Transtheoretical Model of Change

The TTM and its construct, the stages of change (precontemplation, contemplation, action, and maintenance), provide information on the readiness for behavioral change. Understanding what supports or hinders behavioral changes enable drug treatment providers to develop and offer stage-matched interventions geared towards the promotion of successful behavior change (Prochaska, 1984).

The application of the TTM in research studies and projects has been extensive. It has been applied to areas such as smoking cessation (DiClemente, Prochaska, Fairhurst, Velicer, Velasquez, & Rossi, 1991); physical activities and fitness (Tung & Gillet, 2004); HIV prevention (Prochaska, Redding, Harrlow, Rossi, Velicer, 1994); improvements in health and nutrition (Prochaska & Velicer, 1998; Ounpuu, Woolcott, & Greene, 2000); and improvements in parenting abilities by the child welfare system (Littell & Girvin, 2004).

Smith, Subich, and Kalodner (1995) benefited from the TTM by studying readiness for treatment among74 clients at a counseling center to determine who would prematurely terminate or continue in counseling. They assessed clients by using a 32-item instrument with four subscales: precontemplation, contemplation, action, and maintenance. Their results proved that clients who were identified in the precontemplation stage of change terminated counseling prematurely, while those identified in the preparation and action stage continued with the treatment process. The results indicated that knowledge about clients before starting the treatment process provides valuable information for clinicians to minimize early termination and support those in later stages of change.

In a similar study on readiness for treatment utilizing the TTM by Brown, Melchoir, Panter, Slaughter, and Huba (2000), assessed 451 women using a multi-dimensional stages of change. They assessed the women's readiness to change in the areas of drug abuse, emotional problems, violence, and safe sex behaviors, using a four-item scale based on the stages of change. They found women were more likely to enter treatment to address issues posing the greatest immediate harm. Brown et al., (2000)

found that the TTM and its stages of change are useful in predicting who will enter treatment. Similar to Smith et al. (1995) they found clients in the precontemplation and contemplation stages were less likely to enter treatment compared to those in the preparation and action stages of change who were more likely to participate in treatment.

The application of the TTM provides a guide to understanding behavior changes. It suggests that changes in behavior are a series of gradual steps requiring different actions to move individuals along rather than a view of an "all or none" process (Miller & Rollnick, 2002). Researchers adopting this theoretical approach have gained a better understanding of cyclical change process. They also understand the considerable relapse and recycling that occurs for individuals attempting to change any behavior (DiClemente & Prochaska, 1998).

Critiques of the Transtheoretical Model of Change

The TTM is widely used in the health professions, especially in the addiction field to understand how individuals make behavioral changes. However, criticisms regarding the TTM abound. Some of the critiques are against its main construct, the stages of change. Criticisms against it include categorizing behavior change into discrete stages rather than recognizing the multiple processes involved. Criticisms also include the inability to identify the qualitative changes between each stage (Sutton, 2001; Kraft, Sutton, & Reynolds, 1999; Bandura, 1997).

In reviewing the TTM and its application to drug use, Sutton (2001) reports on measuring the stages of change through stage algorithms and multi-dimensional questionnaires. In his review on staging algorithms he notes there are variations in the usage time for stages. Measuring the stages by staging algorithms places individuals in

one of the stages based on recent behavior and intention to change in the near future. In studies by Belding, Iguchi, and Lamb, 1997 and DiClemente et al. (1991), the time periods used to identify clients' intentions to change were not consistent. Belding et al. (1997) classified clients in the preparation stage if they were considering behavior changes within the next 30 days, whereas the DiClemente et al. (1991) study classified clients in the preparation stage if they were considering changes within the next six months. The arbitrary use of varying time frames for the stages leads to different stage placements and distributions for clients. The criticism of the inconsistent use of time frame doubts the assumption that the stages within the TTM are qualitatively different, i.e., they are pseudo-stages rather than true stages (Sutton, 2001). The implication for identifying genuine stages rather than pseudo stages makes it crucial for the use of stage-matched interventions. If stages are pseudo, expectation that different factors will influence stage transition will not be realized (Sutton, 2001).

The other method used to measure the stages of change is the use multi-dimensional questionnaires such as the University of Rhode Island Change Assessment (URICA) and the Stages of Change Readiness and Treatment Engagement Scale (SOCRATES) (Sutton, 2001). The questionnaires are based on the TTM and the stages of change and, like the staging algorithms, have been criticized for its inability to qualitatively distinguish the stages of change (Sutton, 2001). Factor analysis of the URICA in alcohol and drug use studies confirmed a four-factor structure in some but not in others (Belding et al., 1996; DiClemente & Hughes, 1990). Cluster analysis of the URICA subscales to identify distinctive cluster profiles yields different numbers of clusters that do not appear to map on to the original stages identified by the TTM

(Willoughby & Edens, 1996; DiClemente & Hughes, 1990). For example, DiClemente and Hughes' (1990) study of clients in an alcoholism program, yielded clusters they labeled—Precontemplation, Ambivalent, Participation, Uninvolved or Discouraged, and Contemplation. Results also indicated scores were above average on more than one stage dimension which means that clients are in more than one stage. Like the staging algorithm, multi-dimensional questionnaires do not provide qualitatively distinct stages of change. Miller and Tonigan (1996) using the SOCRATES, a 20-item scale developed to measure the stages of change for drinking, is expected to identify the following stages of change: precontemplation, contemplation, determination, action, and maintenance. The SOCRATES yielded clusters identified as Taking Steps (action and maintenance items), Recognition (precontemplation and determination items), and Ambivalence (all contemplation items). They noted that the SOCRATES does not measure the stages of changes developed by Prochaska and DiClemnete.

Despite the criticisms against the TTM, it continues to provide a rich heuristic perspective on behavior changes for the health and addiction field (Littell & Girvin, 2002). The TTM and its stages of change have been used to understand and promote changes in the areas of improving health conditions such as smoking cessation, increasing health and nutrition, and physical activities (DiClemente, et al. 1991; Prochaska, et al. 2000; Tung & Gillet, 2004).

CHAPTER V

LITERATURE REVIEW

This chapter presents empirical studies on criminal justice clients mandated to drug treatment. The chapter focuses on treatment readiness among criminal justice clients including mandated and non-mandates. Relevant studies on legal and non-legal pressures to enter drug treatment are discussed. The chapter concludes with the perceived gaps in the literature and how this research will address them.

Treatment Readiness and Criminal Justice Clients

Drug Abuse Treatment Outcome Studies (DATOS), a study by Knight, Hiller, Broome, and Simpson (2000) sample included over 2,000 clients where they assessed legal pressure and treatment readiness on treatment retention and engagement among clients mandated to 18 long-term residential treatment programs. More than two-thirds (68%) of the sample comprises males, 48% African American, 36% White, and 16% identified as Other. More than half (54%) were 30 years of age or older, 60% had previous treatment experiences, and 42% had at least 6 or more lifetime arrests. The researchers classified legal pressure was classified as moderate to high for clients entering treatment with an official legal status and/or urine monitored by the criminal justice system. Clients were classified as having low or no legal pressure for those with no official legal status. Legal status included parole, probation, or awaiting trial.

Knight et al. (2000) used a 20-item readiness composite scale based on the Circumstance, Motivation, Readiness and Suitability scale (CMRS), a 42-item used to assess treatment readiness. Circumstance refers to external pressures to take part in treatment. Motivation refers to internal factors relating to awareness of needs for change.

Readiness refers to the perceived necessity for treatment in order to change. Suitability relates to the appropriateness of the treatment modality. These treatment engagement assessments were based on measures constructed from items collected during-treatment interviews. The measures were predicated on treatment confidence, commitment to participation, and rapport with counselors.

The results showed 65% of clients under moderate to high legal pressure, the average treatment readiness score was 2.7 (out of 3). Approximately half, (53%) of all clients remained in treatment at least 90 days. Legal pressure and treatment readiness were significant predictors of retention. Readiness was also related to confidence in treatment, commitment to treatment, and rapport with counselors at intake. Treatment readiness was a statistically powerful predictor of retention even after controlling for background variables. Clients with higher levels of treatment disposition at treatment entry were more likely to remain in treatment 90 days or longer. Voluntary preparedness rather than legal pressure was the key predictor of treatment retention.

The results from Knight and colleagues study (2000) are supported by earlier work by Joe et al. (1998) who assessed treatment readiness among clients in varying treatment modalities long term residential (LTR), outpatient drug free (ODF), and outpatient methadone treatment (OMT) programs. Using a sample from the DATOS study, Joe and Associates examined clients' readiness as a predictor of treatment retention and engagement. They used the CMRS to assess treatment readiness. Treatment engagement was identified as confidence in treatment, i.e, whether it helped stop or reduce drug use; counseling rapport, i.e., counselor support of client goals; and therapeutic engagement, i.e., whether clients felt good about progress with problem, were

assessed at months 1 and 3. Retention was identified as 90 days for LTR and ODF, and 360 for OMT.

According to their findings, readiness was a strong predictor of treatment retention for clients in LTR and OMT programs but not for clients in ODF programs. However, they found a significant relationship between treatment readiness and treatment engagement for clients across all three modalities at months one and three. Both studies (Knight et al., 2000; Joe et al., 1998) agreed that for clients in LTR, treatment readiness was a significant predictor of treatment retention even when they controlled for other variables. They concluded that variables associated with retention were age, being employed, and having a legal status.

Later, Gregoire and Burke (2004) examined legal coercion and client readiness for change and the relationship between treatment entry and readiness among 295 clients admitted to five drug and alcohol outpatient programs. Their sample included 77% male; 72% White, 19% African-American, and 8% Hispanic with a mean age of 32.5 years. Seventy-five percent of clients admitted that the criminal justice system brought them treatment. Gregoire and Burke's sample took into account, clients with parole or probation status, pending charges due to driving under the influence (DUI); or other pending legal charges.

A 12-item Readiness to Change Questionnaire (RCQ) was also utilized. The RCQ determines clients' belief about their current drug use and readiness to change. They found a higher percentage of clients reported the legal system brought them to treatment. Notably, 82% of clients who reported parole or probation as coercion treatment entry were identified in the action stage of change.

While Joe et al. (1998), Knight et al. (2000), and Gregoire & Burke (2004) assessed treatment readiness and had similar definitions of criminal justice status, this type of criminal justice involvement differs from Alternative-to-Incarceration (ATI) programs. The differences between these clients and those in ATI programs, is that the latter involves intensive monitoring and supervision of clients' involvement and progress in drug treatment. Drug Treatment Alternative to Prison (DTAP) participants, who fail to complete drug treatment face a prison term under New York state mandatory sentencing statutes for repeat felony offenders. ATI programs such as DTAP operate as a sentence deferred program. The sentence deferred requires DTAP participants to plead guilty for a stated prison sentence and, if they fail to cooperate with treatment, the promised prison term is imposed (Hynes & Swern, 2005). The intense monitoring of participants occurs through monthly progress to the courts along with regular scheduled court appearances. As noted earlier, the unique feature of the DTAP program is its specialized warrant-team who track down absconders (Young, 2002).

Treatment Readiness and Criminal Justice Clients in Alternative-to-Incarceration Programs

There are many studies on ATI clients. However, much of the early work involved evaluating the effectiveness of ATI programs such as Treatment Alternatives to Safer Communities (TASC) and also DTAP, following its implementation in 1990, focusing on demonstration the programs' effectiveness through measures such as retention and reduction in drug use and associated criminal activities (Anglin, Longshore & Turner, 1999; Young, 2002).

Early work by Hubbard et al. (1988), examined TASC and non-TASC clients in residential and drug-free outpatient drug treatment programs on measures such as treatment retention and reduction of drug use. Their multi-site study included a sample of 502 TASC and 805 non-TASC (clients on parole or probation); and 1,078 non-CJ and TASC clients. Three months of treatment retention results indicated that TASC clients stayed in outpatient (48%) and residential (57%) treatment longer than non-TASC (35% outpatient and 51% residential) and non-CJ/TASC clients (30% outpatient and 41% residential). They concluded that drug use was reduced in six months for TASC and non-TACS clients, however, the difference between both groups were relatively small.

Anglin et al. (1999) compared five TASC programs to non-TASC programs. The outcomes compared were drug use, recidivism, and treatment services received and the total sample size was 2,014. Results indicated TASC clients in three of the five programs out performed non-TASC clients and reported 12.5 fewer days of drug use than non-TASC clients. On recidivism, two of the five TASC programs had reduced re-arrest and criminal involvement. With regards to treatment services, four of the five TASC programs were statistically significant. TASC programs, when compared to alternative treatment programs, delivered more services to offenders. Service included drug counseling and urinalysis to detect drug use.

Collins and Allison (1996) later assessed legal pressure and treatment retention among TASC involved clients, other criminal justice, and non-legal source involved in outpatient-drug free and residential treatment programs. According to them, clients with criminal justice referrals had greater retention in treatment than voluntary clients for both modalities. The results were corroborated by Young's and Belenko's (2002) study of

perceived legal pressure among clients in three different ATI programs. The sample included a 130 DTAP and 124 TASC clients, as well as 76 from other criminal justice sources. Young and Belenko reached the conclusion that DTAP clients scored highest on perceived legal pressure, followed by TASC clients, when compared to the comparison to groups scoring the lowest. DTAP clients also continued in treatment for a longer period of time than both TASC and the comparison group. As noted earlier, DTAP's policy is more stringent than TASC's. TASC case managers give stern messages and threats to clients about the consequences of treatment failure

Sung et al. (2004) examined 150 DTAP clients in residential drug treatment on motivation and its relation to treatment compliance. It was identified as a significant tool for treatment. On a scale from 0 (not at all) to 4 (extremely), clients responded as to whether they experienced addiction-related unemployment and problems of relationships. These indicators tap denial and intrinsic motivation, and experiencing them can inspire clients to acknowledge the positive value of treatment. The DTAP clients who were aware of the harmful consequences of their drug use were more compliant with treatment rules.

Longshore and Teruya (2006) examined motivation among 351 TASC clients in drug treatment. They conceptualized motivation both as treatment readiness and treatment resistance. Their readiness measure was an additive index of mean scores on four items reflecting clients' interest in and commitment to treatment. Examples of items on the readiness measure were "if you enter treatment, you will stay for awhile"; "you want to be in treatment". Resistance was the summative index of four items reflecting opposition to participating in drug treatment. Examples of items on the resistance

measure were, “treatment will not be very helpful for you”; “you would go to treatment only if someone else made you”. Clients used a Likert-type scale with responses from strongly disagree to strongly agree. Their sample was mostly male (79%); 61% African American, 34% Non-Hispanic White, and 5% Hispanic, yielding an average age of 28. There was evidence that readiness was a significant predictor of treatment retention during the first six months. Resistance was a factor in drug use as demonstrated by a significant number among users. In keeping with other treatment studies, Knight et al., (2000), Zeldman and Ryan, & Fiscell (2004) claim that readiness forecasts level retention in treatment, relapse rate, and treatment attendance.

The early ATI studies by Hubbard et al. (1988), Anglin et al. (1999), and Collins and Allison (1996) focused on demonstration the programs’ effectiveness by examining measures such as treatment retention, recidivism, and reduced drug use. But even, later studies began examining key treatment issues such as motivation for drug treatment. Sung et al. (2004) and Longshore and Teruya (2006) questioned motivation among ATI clients, but neither specifically addressed clients’ treatment readiness. Readiness is important as an information area that affects the drug treatment process. Both DTAP and TASC programs have great retentive capacity but with little information on clients’ readiness, we cannot assess whether retention is a function of clients’ readiness for treatment, or if they are trying to avoid legal consequences for treatment failure. Information on treatment readiness among ATI clients is essential if they exhibit similar strong readiness found by Gregoire and Burke (2004) among parole and probation clients.

Criminal Justice Treated vs. Non-Criminal Justice Treated Clients

Some studies on criminal justice clients present finer distinctions about legal involvement when assessing treatment readiness. Rempel and DeStefano (2001) studied 1,163 mandated drug court participants on treatment retention and engagement in drug treatment based on their offenses, i.e., misdemeanor, first felony, and multiple and predicate felonies charges. Clients with misdemeanor charges were given 6 months minimum confinement in treatment and faced 8 months of incarceration for treatment failure. Clients with first felony charges were given 12 months of treatment and faced 1 year of incarceration. Clients facing multiple and predicate felony charges faced 18 months in treatment, but, predicate felony charges carried 3 years of incarceration for treatment failure. Overall, researchers found 58% compared to 36% of clients completed Phase One (four consecutive months of treatment). Eighty-four percent of predicate felony clients were more likely to complete Phase One of treatment compared to 69% of multiple, 61% of first felony, and 55% of misdemeanor clients. In addition, the researchers noticed clients completing Phase One of treatment took an average of 8.2 months.

Rempel and DeStefano (2001) did not assess treatment readiness of their subjects. As hinted earlier, treatment readiness involves the willingness and the preparedness to engage in treatment activities (De Leon, et al., 2001). In the study, while it appears that clients facing greater prison time, i.e. three years for treatment failure, can be describe as being in a preparation or action phase of change, lacks of information on readiness and prevents us from explaining the reasons clients took an average of 8.2 months to complete a four-month phase of treatment. Prochaska and DiClemente (1982)

transtheoretical model of change noted that individuals cycle through the stages of change, moving from pre-contemplation, to contemplation, as they think of changes without any plans. They can then cycle to preparation, after having made concrete plans for making necessary changes. Clients then move from there to action. They take steps towards the final stage of maintenance during which the clients adopt new behaviors to maintain the changes made. The eight-month time frame might be an indication of clients' struggle with readiness to fully engage and commit to the transformative process.

Judging differences between criminal justice and non-criminal justice clients, Marshall and Hser (2002) scrutinized 565 clients enrolled in 19 different treatment facilities on demographic and psychosocial characteristics. Clients were grouped according to three categories: mandated to treatment by the criminal justice system (CJ-M), currently involved with the criminal justice system but not mandated (CJ-contact), and no criminal justice contact at treatment entry (no-CJ contact). Their sample included 41% White, 32% African American, 19% Hispanic, 4% Asian Pacific Islander, and 7% from other ethnic groups. The breakdown for criminal justice status included 124 CJ-M, 77 CJ-contact, and 364 no-CJ contact clients. Marshall and Hser assessed several measures some of which included, history of drug use (within the previous year), criminal justice contact (incarceration for more than 30 days in the previous year), and treatment motivation (a subset of items assessing motivation for treatment, desire for help, and treatment readiness).

The outcomes for drug use showed that CJ-M clients were less likely than either of the other groups to have received treatment for drug or alcohol problems within the previous year. On criminal justice contact, CJ-M clients had the highest rate, followed by

CJ-contact and no-CJ contact. On treatment motivation, CJ-M clients scored significantly lower than both groups with respect to problem recognition, desire for help, and treatment readiness. No differences were noticeable between the CJ-contact and no-CJ contact groups with regards to treatment motivation. It should be noted that the average age of the sample was 36 (SD=9.57). However, the CJ-M clients were younger and had experienced more problems with the law. They also had little recent drug treatment, and low motivation and expectations for treatment. These key differences among the CJ-M clients make it imperative that engagement strategies should be the focus attention on the initial treatment-planning phase.

Kelly, Finney, and Moos (2005) examined the same three groups of criminal justice clients. They inquired about treatment readiness among mandated clients in 15 intensive 21-or 28-day short-term inpatient drug treatment programs. Their all male sample (2,095) included clients involved in the justice system and mandated to treatment (JSI-M, 7%); those involved with the justice system but not mandated to treatment (JSI, 11%) and those with no justice system involvement (No-JSI, 82%). The average age of the sample was 42 years with an ethnic make up predominantly African Americans (49%), and Whites (45%). The remaining 6% comprised Hispanics, Native Americans, and Asians. The researchers used a four-item Determination subscale adapted from the Stages of Change Readiness and Treatment Eagerness to Change scale (SOCRATES) to measure readiness for treatment. As in the case of Marshall and Hser (2002), Kelly et al. (2005) results indicated JSI-M clients had lower motivation for treatment than the JSI and No-JSI clients. The JSI-M clients also had fewer substance-related consequences, were

less likely to perceive themselves as "drug addicts," and less likely to have prior treatment episodes compared to both JSI and No-JSI clients.

Thirty-nine percent of the JSI-M clients identified themselves as drug addicted compared to 55% JSI and 53% no-JSI clients. The low percentage on drug problem identity and the low treatment scores among JSI-M clients might also be attributed to JSI-M clients possibly being at a pre-contemplation stage of change. Clients at this pre-contemplation stage are not aware of their drug problems nor do they see a need for any kind of change. Another plausible explanation for the lower percentage of JSI-M clients identified as drug addicts compare to JSI and no-JSI clients might be due to age. JSI-M clients were found to be much younger than the JSI and No-JSI clients. As drug abusers get older, their drug use and activities tend to decrease and, therefore they might not identify themselves as drug-addicted and see no need for treatment (Sung, Belenko, Feng, & Tabachnick, 2004).

Non-criminal Justice Pressure on Client Readiness

Mandates for drug treatment admission are often associated with the legal system. However, some data suggest criminal justice clients view non-legal pressure just as influential on drug treatment entry (Rempel & DeStefano, 2001). Non-legal pressures may be more influential in drawing clients into treatment than formal mandates. For example, drug abusers commonly rate legal entanglements as less significant to their decision to quit or reduce drug use than other factors such as health problems, interpersonal or social conflicts (Thom, 1987). Brecht and colleagues (1993) interrogated non-legal reasons for treatment entry among 720 methadone maintenance clients committed to drug treatment. Their sample included an almost even split between males

(54%) and females (46%) with 74% Whites and 26% Hispanics. Among clients with criminal justice involvement, the common non-legal reasons identified for treatment entry was “to reduce heroin use,” “tired of heroin lifestyle,” and “family/friend pressure”. The researchers reported that 84% Whites and 81% Hispanic males, and 90% Whites and 98% Hispanic females reported at least one non-legal pressure.

Pressure from the abusers’ social network plays a major role in facilitating treatment entry and the initiation of abstinence. Marlowe, Kirby, Bonieskie, Glass, Dodds, Husband, Platt, and Festinger (1996) believed that among 260 clients in an intensive outpatient program, the greatest proportion of responses to reasons for drug treatment entry were in the psychological and financial nature, followed by social, familial, and medical. Only thee percent of the reasons offered by these clients for entering drug treatment reflected legal persuasion or coercion, despite the fact that 25% of the clients were specifically referred to treatment by criminal justice agencies. This was attested to by Friedman, Tomko, and Utada (1991) whose clients’ motivation and treatment readiness correlated with perceived family pressure to seek treatment.

Recently, Marlowe, Kirby, Merikle, Festinger, and McLellan (2001) noted slightly different results when they interviewed 415 clients in different drug treatment modalities about reasons for treatment entry. Their client sample included 21% who were on probation or parole or had pending criminal charges. Treatment entry pressures were grouped into five clusters: financial and social (being in serious conflict with others over drug related debts or failure to meet financial obligations), financial, legal, medical/psychiatric, and family. The clients that Marlowe and colleagues dealt with had

criminal justice ties and they identified family, social, and medical woes as incentives for treatment entry.

Non-legal pressures have often encouraged clients to abstain from drug use and to complete drug treatment. Rempel and DeStefano (2001) examined legal pressures among drug court clients mandated to treatment, assessing family court involvement, such as pending cases to gain or retain custody of their children. They found that the completion rate increased from 61% to 80%, for clients with a pending family court case. Clients faced with legal obligations to enter drug treatment identify non-legal sources such as family, social network, or psychological areas as grounds for drug treatment entry and retention.

Summary

Studies on criminal justice clients in drug treatment have demonstrated success such as reduced drug use, reduced criminal activities, and increased program retention. Studies have also assessed motivation for treatment and its relationship to retention found criminal justice clients demonstrated high motivation at treatment entry and have sometimes remained in treatment for a longer time. Knight et al. (2000) determined that treatment readiness and not legal pressure was the greatest stimulus for treatment retention among clients with a criminal justice status. Joe et al. (1998) saw a relationship between readiness and participation, where the former was associated with early therapeutic engagement and favorable perception of counselors (Broome, Knight, Hiller, & Simpson, 1997). Non-legal pressure from sources such as family, significant other, or medical reasons were identified as influential reasons for drug treatment entry despite criminal justice involvement (Marlowe, 2001; Ward & Hemsely, 1981).

Gaps in the Literature

Drug treatment is an effective ATI option for drug-abusing offenders. The literature has demonstrated that forced clients facing legal pressures for treatment are registering at a higher rate of readiness for treatment. However, there are some gaps in the studies regarding ATI clients' readiness for treatment. Among them are the following: limited information on treatment readiness among ATI clients in drug abuse programs; limited information on ATI clients with prior treatment or criminal justice involvement entering drug treatment; and limited information on the impact of non-legal pressures among diversion clients.

Limited Information on Treatment Readiness among Alternative-to-Incarceration Clients

Studies on readiness involving criminal justice clients have included clients with legal status such as parole, probation, or pending legal charges. However, a few have assessed treatment readiness among criminal justice clients involved with ATI programs such as DTAP, TASC, or Drug Courts (Brecht, et al., 1993; Gregorie & Burke, 2004; Marshall & Yser, 2002). Rempel's and DeStefano's (2001) study of ATI clients facing misdemeanor, first felony, or multiple and predicate felonies found that those with predicate charges were more likely to complete four consecutive months of treatment than those with lesser charges. Unfortunately, the completion took eight months. The researchers did not assess treatment readiness as part of their study that might have offered a explanation for the extended time for clients to complete four consecutive months of treatment.

The proposed research will add to existing knowledge on treatment readiness and on ATI clients by building on studies by Longshore and Teruya (2006) and Farole and

Cissner (2005) through the use of a standardized measure such as the Circumstance, Motivation, (CMR) Factor Intake questionnaire to assess treatment readiness. Longshore and Teruya (2006) looked at treatment readiness among TASC clients and found clients with higher treatment readiness stayed longer in treatment. They used an additive index of mean scores reflecting interest and commitment to treatment to assess treatment readiness. The use of a standardize instrument such as the CMR-Factor Intake will allow for consistency in findings and it has the ability to replicate studies by identifying different variables that can impact treatment readiness. Farole and Cissner (2005) conducted a qualitative study on the effectiveness of drug court operations by examining clients' motivation for drug treatment. Through their seven focus groups of five to fifteen participants, they noted clients' motivation for entering treatment was to avoid prison. Participants were initially reluctant to join court-ordered treatment but wanted to avoid prison. They admitted changing their motivation after being in the program and becoming excited about completing treatment and staying clean.

The purpose of this research is assessment of client readiness for treatment using the Circumstance, Motivation, and Readiness for Substance Abuse Treatment Factor Scales Intake Version (CMR Factor Scales Intake Version) that allows treatment providers to better serve criminal justice clients who are mandated to drug treatment. This is essential to treatment providers because: (1) it serves as a building tool in the therapeutic relationship and (2) it demonstrates competence in servicing the alternative to incarcerated population. Information on the clients' treatment readiness and their ability to engage in program activities can serve as discussion points when developing an initial treatment plan thereby, developing and building trust as part of the client-counselor

relationship. The counselor is able to determine the clients' readiness for treatment not only through the CMR Factor Scales Intake Version but also by face-to-face interactions. The use of a standardized measure such as the CMR Factor Scales Intake Version is also important because as more funding is made available to service the mandated population, drug treatment providers will compete for funding. Competing for referral and funds usually requires providers to provide evidence of their ability to service clients with demonstrated successful outcomes.

Limited Information on Prior Treatment and Criminal Justice Involvement among Alternative-to-Incarcerated Clients

The literature is rather sparse on treatment readiness among ATI clients with prior treatment history or legal involvement. Studies have identified common client characteristics by ethnicity, age, education, and martial status as predictors of treatment entry, engagement, and treatment retention (Butzin, Saum, & Scarpitti, 2002). Information on key markers such as prior drug treatment episodes or prior legal involvement is limited among ATI clients. Butzin and colleagues (2002) looked at 116 ATI clients and concluded that those most likely to complete treatment were White, high school educated, married or once married, and had low drug use. Their work did not include prior drug treatment or prior criminal justice involvement. There are important characteristics, since ATI clients have several contacts with both systems and cycle in and out of prison and drug treatment programs. In the process of recovery, relapse is a common occurrence and is part of the learning process that may lead ultimately to recovery and prevent recidivism (Tim, Leukefeld, & Platt, 2001).

The purpose of this research is to assess readiness for drug treatment among ATI clients by addressing the following research questions:

(1) Is there a relationship between treatment readiness and client type?

(2) Is there a relationship between treatment readiness and criminal justice referral type?

(3a) Is there a relationship between treatment readiness and whether clients have drug treatment history?

(3b) Is there a relationship between treatment readiness and whether clients have criminal justice history?

(4) What is the relationship between treatment readiness and client attributes?

CHAPTER VI

RESEARCH DESIGN AND METHOD

This chapter discusses the research design and methods used to assess treatment readiness among ATI clients entering drug treatment. The study posed the following research questions:

Research Question 1

RQ1: Is there a relationship between treatment readiness and client type?

Research Question 2

RQ2: Is there a relationship between treatment readiness and criminal justice referral type?

Research Question 3a

RQ3a: Is there a relationship between treatment readiness and drug treatment history?

Research Question 3b

RQ3b: Is there a relationship between treatment readiness and criminal justice history?

Research Question 4

RQ4: Is there a relationship between treatment readiness and client attributes?

Research Design

The research was designed as a non-experimental survey method using a non-probability convenience sample to select subjects. In order to address the research questions, the site selection and sampling strategy were intended to (1) maximize access to demographically diverse clients, in real life treatment settings; and (2) to reduce the threats of treatment interference for this potentially vulnerable population. A non-experimental method did not involve the manipulation of any treatment conditions such

as assigning subjects to treatment or non-treatment conditions and it was well suited for the purposes of this study. As already noted, the targeted population was identified through non-probability convenience sampling. While it was possible to conduct a multi-site research akin to the DATOS study (Simpson et al., 1997) assessing motivation and treatment readiness, this research used convenience sampling because the proposed research site service clients from various sectors of the criminal justice systems such parole, probation, Alternative-to-Incarceration (ATI) programs, and Drug Court, and other mandating social service agencies. The research site facilitated access to clients from various criminal justice agencies. The advantage of using convenience sampling included dealing with limited resources such as the inability for multi-site recruitment. However, there were limitations to this sampling method. One of them is the inability to generalize findings from the research to the population at large because convenience sampling is not a true representative sampling of the population. The researcher however, recognized and accepted the constraints.

Research Site

The research site selected was a non-profit agency in New York City that provides services that include residential and outpatient drug treatment, HIV/AIDS services, domestic violence services for women, supportive housing programs for singles and families, and also homeless prevention services. It has an extensive working relationship with various criminal justice programs throughout New York City that involves acceptance referrals from the New York City Department of Probation, New York State Department of Parole, Treatment Accountability for Safer Communities (TASC), Drug Treatment to Alternative to Prison (DTAP), and Drug Treatment Courts.

The residential drug treatment program is licensed and funded by the New York State Office of Alcoholism and Drug abuse Services (NYS OASAS). It offers drug treatment from six (6) to 12 months to 384 men and women in a highly structured environment that emphasizes personal accountability. The staff includes directors, program managers, drug abuse counselors, social workers, vocational counselors, and medical staff. Clinical services provided include groups and individual counseling, vocational/educational activities, and specialized groups for mental health. Clients' progress through the phases of the program each of which has its privileges, and, as client move from one phase to another, they earn more privileges and increased responsibilities.

Target Population

The target populations were criminal justice clients and voluntary clients, who have been in the program 30 days or less. A 30-day timeframe was identified because this is consistent with the research literature in assessing treatment readiness as clients are still adjusting to the treatment environment and are still very early in the treatment process (Joe, Simpson, & Broome, 1998). Thirty days was also identified as a crucial time-frame in which clients were at a risk of dropping out of treatment (De Leon et al. 1997). Clients must have been able to speak and read English. While it was easy to translate all related research documents from English to Spanish, the researcher was limited in the ability to communicate with subjects in Spanish and to employ a Spanish-speaking assistant. Due to the nature of the targeted population i.e., their vulnerability, all potential subjects were informed during the recruiting process that participation was voluntary and the decision not to participate would not affect the treatment process including information to the referring criminal justice agency.

Client Recruitment

The proposed research design involved enlisting the assistance of the admission counselor to introduce the research to all new clients according to a script that described the research and its purpose (See Appendix A). The process required the admission's counselor to provide a copy of a recruitment flyer with the researcher's contact information. The recruitment flyer highlighted the research purpose and eligibility criteria (See Appendix B). Interested participants would have to contact the researcher, however, following a series of meetings with the Sr. Director, Director, and Program Manager, the proposed recruitment process was not feasible. Newly admitted clients, in the orientation phase, did not have access to phones; and logistically, it would be difficult for staff to be available for clients to place a phone call to the researcher to schedule appointments.

The modified recruitment process involved the researcher attending the treatment program's evening community meetings to announce and discuss the research. Visits were conducted monthly to attract new clients within the 30-day period. At each visit, following the community meeting, the program manager requested all clients admitted within 30-days to remain behind, where the research was introduced. Clients were informed at the start of the presentation that, participation was voluntary and would not affect their treatment process, including notification to the program manager if they declined to participate. Clients were informed that while there were no direct benefits to their participating, the information provided would contribute to better program services for future clients. Clients were also informed that there was no financial compensation for participating.

Those who agreed to participate met with the researcher and were reminded their participation was voluntary and could withdraw at anytime. Clients were given the Consent to Participate and the HIPAA Research Authorization to review and sign. The consent to participate outlined the research purpose, procedure, risks, benefits, alternative procedures, financial consideration, privacy and confidentiality, withdrawal, and contact information (See Appendix C). The HIPPA Research Authorization form allowed consenting clients to give written authorization to use protected health information for the purpose of the research (See Appendix D). Clients then completed the Circumstance, Motivation, and Readiness Scale for Substance Abuse Treatment (CMR Factor Scales Intake Version) and the Client Demographic/Psychosocial Form (See Appendix E and F). Upon completion, all clients received copies of the Consent to Participate and HIPPA Research Authorization forms. All clients also received referral information to local community-based programs that offered free or low-cost social services where they could seek assistance to address any issues that surfaced during their participation (See Appendix G). The average participation time for each client was 15 to 20 minutes. The research also obtained a Certificate of Confidentiality from the National Institute of Health because of the sensitive information concerning participants' drug use and treatment history, and criminal justice involvement (See Appendix H).

Site visits were conducted in August, September, October, November, and December 2009. In 2010, visits were conducted in January and February.

Data Collection Instruments

Data was collected using the following instruments: Circumstance, Motivation, and Readiness Scales for Substance Abuse Treatment (CMR Factor Scales Intake Version) and the Client Demographic/Psychosocial Form (Client Demo/Psy).

Circumstance, Motivation, and Readiness for Substance Abuse Treatment (CMR Factor Scales Intake Version)

Permission was obtained from Dr. Gerald Melnick of the National Development and Research Institute (NDRI) to use the Circumstance, Motivation, and Readiness for Substance Abuse Treatment (CMR Factor Scales Intake Version) questionnaire for this research. The CMR Factor Scales Intake Version was utilized to collect data on subjects' level of treatment readiness when entering drug treatment. The CMR Factor Scales Intake Version is an 18-item factored version of the 42-item Circumstances Motivation Readiness Suitability (CMRS) scale developed based Prochaska and DiClemente (1982) stages of change model. The CMR Factor Scales Intake Version was selected because it is highly correlated with the 42-item CMRS and is efficient enough to administer.

The CMR Factor Scales Intake Version is a self-administered instrument designed to measure motivation and readiness for treatment and to predict retention in treatment among abusers of illicit drugs. There are four subscales to the CMR Factor Scales Intake Version: Circumstance 1 (pressure to enter treatment) refers to the external reason to engage in treatment, such as fear of prison or family pressure, e.g. "I am sure that I would go to jail if I didn't enter treatment"; I am sure that my family will not let me live at home if I did not come to treatment". The second subscale is Circumstance 2 (pressure to leave treatment) refers to the external pressure to leave treatment such as financial problems or

family pressure, e.g. “Basically, I feel I have too many outside problems that will prevent me from completing treatment (spouse/relationship, children, loss of income, family problems)”.

The next subscale is Motivation (internal pressure) that refers to intrinsic factors relating to the sense of things getting worse, the fear of hurting others, or the desire for a better life. This sub-scale weighs personal reasons for change; these reasons may be positive or negative. Positive reasons consist of self-affirming strivings, e.g. “It is more important to me than anything else that I stop using drugs”. Negative reasons consist of disapproving self-evaluation, e.g. “Often I don’t like myself because of my drug use”.

The final subscale is Readiness (perceived need for treatment) that refers to the perceived necessity for treatment in order to change, e.g. “Basically, I don’t see any other choice for help at this time except some kind of treatment”; “I am really tired of using drugs and want to change, but I know I can’t do it on my own”; “I’ll do whatever I have to do to get my life straightened out”.

The CMR Factor Scales Intake Version has been used with mandated and voluntary clients in different drug treatment modalities and has been found to be reliable and valid in its assessment for readiness for change and treatment participation (De Leon, Melnick, & Kressel, 1997; De Leon, Melnick, Kressel, & Jainchill, 1994; Marlowe et al., 2001; Maxwell, 2000; Melnick, De Leon, Thomas, Kressel, & Wexler, 2001). A psychometric evaluative study of the CMR Factor Scales Intake Version found the alpha coefficient for each of the three subscales to be .54 (circumstances), .70 (motivation), and .85 (readiness). The total score coefficient was the highest at .86 (Soyez, De Leon, Rosseel, & Broekaert, 2006). A study was also conducted with 1,398 clients admitted to

residential (TC) drug treatment programs using the CMR scale. Clients were grouped according to four major substances—cocaine (864), opiates (266), marijuana (190), and alcohol (78). The findings indicated a significant but small difference in initial motivation and readiness by primary drug. Initial motivation and readiness scores were significant predictors of retention in treatment across most groups (De Leon, et al., 1997). Also De Leon et al.'s (2000) study of 715 inmates participating in prison-based TC program using the CMR scale to assess motivational levels for treatment and entry into aftercare, found that high motivation had a significant direct effect on entry into aftercare, which in turn had a direct effect on recidivism. The scale assessed clients' perception of external factors as well as internal motivation, relevant to participation in residential therapeutic communities (Carey, Purnine, Maisto, & Carey, 1999).

The CMR Factor Scales Intake Version questionnaire can be completed in less than 10 minutes. It does not require special training to administer; it has a third (3^{rd}) grade reading level; and respondents use a 5-point Likert scale to rate each statement from strongly disagree to strongly agree. Scoring the 18-items CMR Factor Scales Intake Version involves reversing the score values for questions 4, 5, 6, and 12—scores of 5=1, 4=2, 3=3, 2=4, 1=5. The individual score value of each scale are then summed to derive the scale value. The scale values are then summed to drive the Total Score. Not Applicable responses are recoded to the client's mean score for the scale in which the response falls (Melnick et al., 2001).

Client Demographic/Psychosocial Form (Client Demo/Psych)

The Client Demo/Psych was developed to capture clients' demographic and psychosocial information that have been identified in the literature as relating to

motivation among the criminal justice population. The variables identified have been used in previous empirical studies and relates to this research in measuring treatment readiness among criminal justice clients. Research has focused on fixed and dynamic variables as predictors of treatment outcomes (Condelli & DeLeon, 1993). Fixed variables include demographic and background characteristics. Magura and Demsky (1998) tested variables such as gender, age, race, and arrest history on client retention in a methadone treatment program and found older age and no criminal involvements were associated with longer retention in drug treatment. Other empirical studies using the identified variables include Agosti, Nunes, and Ocepeck-Welikson (1996) who investigated client predictor variables associated with treatment attrition, and found that those who left treatment early were most likely to be African-American or Hispanic. The Client Demo/Psycho can be completed in less than 10 minutes and has a fifth (5^{th}) grade reading level.

Data Analysis

The research tested the following hypotheses:

Hypothesis 1

$H1_o$: There is no relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and client type (voluntary vs. mandated). Voluntary clients were coded as 0 and mandated clients were coded at 1 (voluntary = 0 vs. mandated = 1).

$H1_a$: There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version, and client type (voluntary vs. mandated). Voluntary

clients were coded as 0 and mandated clients were coded at 1 (voluntary = 0 vs. mandated = 1).

To examine research question 1, multiple regressions were conducted to assess if there was a relationship between treatment readiness (circumstances, motivation and readiness) and client type (voluntary vs. mandated) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The demographic variables were entered as covariates into the first block of the regression. The predictor variable (client type: voluntary vs. mandated) was entered into the second block of the regression along with the demographic variables.

Hypothesis 2

$H2_o$: There is no relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and referral type (DTAP referral vs. TASC referral). DTAP referrals were coded as 0 and TASC referral as 1 (DTAP referral = 0 vs. TASC referral = 1).

$H2_a$: There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and referral type (DTAP referral vs. TASC referral). DTAP referral was coded as 0 and TASC referral as 1 (DTAP referral = 0 vs. TASC referral = 1).

To examine research question 2, multiple regressions were conducted to assess if there was a relationship between treatment readiness (circumstances, motivation and readiness) and referral type (DTAP referral vs. TASC referral) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The demographic variables were entered as covariates into the first block of

the regression. The predictor variable (referral type: DTAP vs. TASC) was entered into the second block of the regression along with the demographic variables.

Hypothesis 3a

$H3a_o$: There is no relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and prior drug treatment (no vs. yes). No drug treatment history was coded as 0 and drug treatment history was coded as 1 (no drug treatment history = 0 vs. drug treatment history = 1).

$H3a_a$: There is a relationship betweentreatment readiness, as measured by the CMR Factor Scales Intake Version and prior drug treatment (no vs. yes). No drug treatment history was coded as 0 and drug treatment history was coded as 1 (no drug treatment history = 0 vs. drug treatment history = 1).

To examine research question 3a, multiple regressions were conducted to assess if there was a relationship between treatment readiness (circumstances, motivation and readiness) and prior drug treatment (no vs. yes) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The demographic variables were entered as covariates into the first block of the regression. The predictor variable (drug treatment history: no vs. yes) was entered into the second block of the regression along with the demographic variables.

Hypothesis 3b

$H3b_o$: There is no relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and criminal justice involvement history (no vs. yes). No criminal justice history was coded as 0 and criminal justice history was coded as 1 (no criminal justice history = 0 vs. criminal justice history = 1).

$H3b_a$: There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version questionnaire and criminal justice involvement history (no vs. yes). No criminal justice history was coded as 0 and criminal justice history was coded as 1 (no criminal justice history = 0 vs. criminal justice history = 1).

To examine research question 3b, multiple regressions were conducted to assess if there was a relationship between treatment readiness (circumstances, motivation and readiness) and criminal justice involvement history (no vs. yes) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The demographic variables were entered as covariates into the first block of the regression. The predictor variable (criminal justice involvement history: no vs. yes) was entered into the second block of the regression along with the demographic variables.

Hypothesis 4

$H4_o$: There is no relationship between client type (voluntary vs. mandated), referral source (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) and treatment readiness, as measured by the CMR Factor Scales Intake Version.

$H4_a$: There is a relationship between client type (voluntary vs. mandated), referral source (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) and treatment readiness, as measured by the CMR Factor Scales Intake Version.

To examine research question 4, multiple regressions were conducted to assess if there was a relationship between treatment readiness (circumstances, motivation and

readiness) and client type (voluntary vs. mandated), referral source (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The demographic variables were entered as covariates into the first block of the regression. The predictor variables client type (voluntary vs. mandated), referral source (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) were entered into the second block of the regression along with the demographic variables.

Multiple Regression and Preliminary Treatment of Data

Since the research dealt with convenience sample, all multiple regressions were used descriptively to determine if there were relationships between the client predictors variables (client type, criminal justice referral, drug treatment history, and criminal justice history) and the treatment criterion variables (circumstances, motivation, and readiness) and were used to describe patterns in the data set rather than as a method of inference (Lewis & Noguchi, 2009).

Demographic variables with more than two categories were transformed into dichotomous variables prior to analysis to reduce the number of predictors (i.e.: ethnicity became African Americans vs. all other; education level became less than high school education vs. all other; and marital status became married vs. all other).

Multiple regressions were used to assess if a group of independent variables predicted the dependent variables (criterion) and was an appropriate analysis when the goal of research is to assess the extent of a relationship among a set of dichotomous or interval/ratio predictor variables on an interval/ratio criterion variable (Tabachnick &

Fidell, 2006). Standard multiple regression—the enter method—was used. The standard method entered all independent variables (predictors) simultaneously into the model. Variables were evaluated based on what each one adds to the prediction of the dependent variable that was different from the predictability provided by the other predictors (Tabachnick & Fidell, 2006).

CHAPTER VII

RESULTS

One hundred and thirty-nine individuals participated in the study. Some participants did not answer all demographic items, resulting in varied sample counts for the demographic characteristics. Table 3 presents the general demographic characteristics of the participants. One hundred and thirteen (81.3%) of the participants were male and 26 (18.7%) were female. Of the participants (61, 44.2%) were African American; the majority reported they were never married (89, 64%); and (57, 41%) reported having less than a high school diploma.

Table 3

Demographic Characteristics of Participants

Characteristic	*n*	%
Gender		
Male	113	81.3
Female	26	18.7
Race		
African American	61	44.2
Hispanic	52	37.7
White	21	15.2
Other	4	2.9
Marital Status		
Never Married	89	64.0
Married	15	10.8
Separated	17	12.2
Divorced	17	12.2
Widowed	1	0.7
Education Level		
Less than HS/Some HS	57	41.0
Completed High School	35	25.2
Some College	37	26.6
Completed College	10	7.2

Table 4 presents the means and standard deviations for participant age and number of children. For age, the minimum age was 19 and the maximum age was 68 (M = 40.38, SD = 9.95). For number of children, the minimum was 0 and the maximum was 14 (M = 1.71, SD = 2.20).

Table 4

Means and Standard Deviations on Participant Age and Number of Children

Variable	*N*	*M*	*SD*
Age	135	40.38	9.95
Number of children	137	1.71	2.20

The characteristics regarding participants' drug use and criminal justice history are presented in Table 5. Eighty-two (59%) participants were mandated to treatment and 57 (41%) were not; 93 (66.9%) had prior drug treatment and 46 (33.1%) had no prior drug treatment; 86 (61.9%) reported no pressure to enter treatment and 53(38.1%) acknowledged pressure to enter treatment. A large number reported the legal system as their pressure source (50, 36%). For participants referred by the criminal justice system, 25 (18.0%) were referred by TASC, 25 (18.0%) were referred by the parole system, and 20 (14.4%) the drug court system. Fifty-three (38.1%) participants noted the criminal justice referral source was not applicable to their situation.

The prime drug used was crack, which was used by 37 (26.6%) participants, followed by cocaine (28, 20.1%) and alcohol (28, 21.1%). Forty-four (31.7%) reported a second drug used, for most, this was alcohol, used by 44 (31.7%) participants. Thirty-three (23.7%) participants did not use a second drug. The majority of participants (72, 52.2%) reported no drug treatment during the past 18 months. For those that had previous drug treatment (N = 132), 40 (30.3%) reported being in treatment for less than one month. The type of drug treatment was a drug-free residential setting for 49 (35.8%)

participants. Sixty-five (47.8%) participants had no drug arrests during the past 18 months, and 34 (25%) reported one drug arrest during the past 18 months.

Table 5

Characteristics of Participants' Drug Use History and Criminal Justice History

Characteristic	*n*	%
Mandated treatment		
No	57	41.0
Yes	82	59.0
Prior drug treatment		
No	46	33.1
Yes	93	66.9
Pressure to enter treatment		
No	86	61.9
Yes	53	38.1
Pressure source for entry into drug treatment		
Legal	50	36.0
Family	23	16.5
Friends	1	0.7
Self	3	2.2
Medical	2	1.4
Welfare	3	2.2
Other	21	15.1
Not applicable	36	25.9
Criminal Justice involvement		
No	60	43.2
Yes	79	56.8

Table 5 (cont)

Characteristic	*n*	%
Criminal Justice referral source		
Drug Court	20	14.4
TASC	25	18.0
Probation	4	2.9
Parole	25	18.0
DTAP	5	3.6
Other	7	5.0
Not applicable	53	38.1
Prime drug		
Cocaine	28	20.1
Crack	37	26.6
Opiates	19	13.7
Marijuana	24	17.3
Alcohol	28	20.1
Other	3	2.2
Second drug		
Cocaine	18	12.9
Crack	9	6.5
Opiates	9	6.5
Marijuana	26	18.7
Alcohol	44	31.7
None	33	23.7
Number of times in drug treatment past 18 months		
0 times	72	52.2
1 time	29	21.0
2 times	24	17.4
3 times	7	5.1
5 times	1	0.7
8 times	1	0.7
10 times	3	2.2
15 times	1	0.7

Table 5 (cont)

Characteristic	*n*	%
Time in last drug treatment		
< 1 month	40	30.3
1-6 months	35	26.5
7-12 months	5	3.8
13-24 months	5	3.8
Not applicable	47	35.6
Type of last drug treatment		
Outpatient	21	15.3
Drug-free Residential	49	35.8
Detox	22	16.1
Not applicable	45	32.8
Number of drug arrests past 18 months		
0 arrests	65	47.8
1 arrest	34	25.0
2 arrests	17	12.5
3 arrests	8	5.9
4 arrests	4	2.9
5 arrests	3	2.2
6 arrests	2	1.5
7 arrests	2	1.5
10 arrests	1	0.7

Table 6 presents the means and standard deviations for number of times in treatment during the past 18 months, and number of drug related arrests during the past 18 months for drugs. For number of times in treatment during the past 18 month, the minimum was 0 and the maximum was 15 (M = 1.13, SD = 2.14). For number of times arrested during the past 18 months for drugs, the minimum was 0 and the maximum was 10 (M = 1.17, SD = 1.72).

Table 6

Means and Standard Deviations on Number of Times in Treatment and Number of Drug Related Arrests

Variable	*n*	*M*	*SD*
Number of times in treatment during past 18 months	138	1.13	2.14
Number of drug related arrest during past 18 months	136	1.17	1.72

Descriptive statistics were calculated on the CMR Factor Scales Intake Version (Circumstances, Motivation and Readiness). Table 7 provides the range, means and standard deviations for the composite score of each scale. Survey responses were coded as 1 = *strongly disagree*, 2 = *disagree*, 3 = *neither agree nor disagree*, 4 = *agree* and 5 = *strongly agree*. Participants also had the option of selecting 9 = *not applicable* and in those cases, the data was treated as missing and not used in the analysis. The participant count for each subscale is provided in Table 7. Scores on Circumstances subscale ranged from a low of 2.00 to a high of 5.00 (*M* = 3.44, *SD* = 0.58); scores on the Motivation subscale ranged from a low of 1.00 to a high of 5.00 (*M* = 3.95, *SD* = 1.08) and scores on the Readiness subscale ranged from a low of 1.43 to a high of 5.00 (*M* = 3.83, *SD* = 0.96).

Table 7

Means and Standard Deviations on CMR Factor Scales Intake Version

Variable	*n*	Min.	Max.	*M*	*SD*
Circumstances	92	2.00	5.00	3.44	0.58
Motivation	122	1.00	5.00	3.95	1.08
Readiness	116	1.43	5.00	3.83	0.96

Preliminary Treatment of Data

Demographic variables with more than two categories were dichotomized for analysis. For gender, males were coded 0 and females were coded 1; for race, African Americans were coded 1 and all others were coded 0; for marital status, married participants were coded 1 and all others were coded 0; for education level, those with fewer than 12 years education were coded 1 and all others were coded 0. Number of children was retained as ratio variable. The predictor variable client type was coded as 0 for voluntary and 1 for mandated. Referral source consisted of two categories: participants referred by DTAP were coded as 0 and those referred by TASC were coded 1. Drug treatment history was coded with 0 for no history and 1 drug treatment history; and criminal justice history was coded with 0 for no history and 1 for criminal justice history. In preliminary analysis the assumption of linearity was assessed through an examination of the residual scatter plots; the assumption was met. The multiple regressions were used descriptively to determine if there was a relationship between the type of client and their treatment readiness (Lewis & Noguchi, 2009).

Hypothesis 1

There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version, and client type (voluntary vs. mandated).

To examine hypothesis 1, multiple regressions were conducted to assess if client type (voluntary vs. mandated) predicts treatment readiness (circumstances, motivation and readiness) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The first regression examined circumstances. The demographic variables were entered into the first block of the

regression and the predictor variable (client type: voluntary vs. mandated) was entered into the second block of the regression with the demographic variables as covariates. The final model explained 6.7% of the variation in circumstances.

The results showed that all the predictors in the model contributed to circumstances, including the demographic covariates. Of the variables in the model, education level made the strongest unique contribution for explaining circumstances, since its unstandardized coefficient had a higher absolute value than any other one in the model (B = 0.20), followed by marital status (B = -0.17). Client type made the third strongest unique contribution (B = -0.15); a higher average level of agreement on circumstances was associated with those who were not mandated to treatment (voluntary clients). In the final model, race and gender provided the least contribution for circumstances. Table 8 presents the unstandardized coefficients for the demographic variables and client type.

Table 8

Unstandardized Coefficients for Client Type (Voluntary vs. Mandated) Predicting Circumstances after Controlling for Demographics

Model	*B*
Block 1	
Gender	-0.09
Age	0.01
African American vs. other	0.02
Married vs. other	-0.20
Less than high school education vs. other	0.21
Number of children	0.01
Block 2	
Gender	-0.12
Age	0.01
African American vs. other	0.01
Married vs. other	-0.17
Less than high school education vs. other	0.20
Number of children	0.01
Client type (voluntary vs. mandated)	-0.15

The second regression examined motivation. The demographic variables were entered into the first block of the regression and the results showed a relationship between the demographic variables and motivation. The predictor variable (client type: voluntary vs. mandated) was entered into the second block of the regression along with the demographic variables. The model explained 21.7% of the variation in motivation.

The results show that all the predictors in the model contributed to motivation, including the demographic covariates. Of these, gender, having the coefficient with the highest absolute value in the model, provided the strongest unique contribution for

motivation (B = 0.67). Client type provided the second strongest unique contribution for motivation (B = -0.53); a higher level of agreement on motivation was associated with those not mandated to treatment (voluntary clients). In the final model, race, marital status, and highest education level provided the least contribution for motivation. Table 9 presents the unstandardized coefficients for the demographic variables and client type.

Table 9

Unstandardized Coefficients for Client Type (Voluntary vs. Mandated) Predicting Motivation after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.82
Age	0.03
African American vs. other	0.08
Married vs. other	-0.01
Less than high school education vs. other	0.41
Number of children	-0.09
Block 2	
Gender	0.67
Age	0.02
African American vs. other	0.01
Married vs. other	0.07
Less than high school education vs. other	0.39
Number of children	-0.08
Client type (voluntary vs. mandated)	-0.53

The third regression examined readiness. The demographic variables were entered into the first block of the regression and the results showed a relationship between the demographic variables and readiness. The predictor variable (client type:

voluntary vs. mandated) was entered into the second block of the regression with the demographic variables. The final model explained 14.1% of the variation in readiness.

The results showed that all the predictors in the model contributed to readiness, including the demographic covariates. By magnitude, client type provided the largest contribution for readiness (B = -0.50); a higher level of agreement on readiness was associated with those who were not mandated to treatment (voluntary clients). This was followed by gender (B = 0.34). In the final model, race, marital status and highest education level, provided the least contribution for readiness. Table 10 presents the unstandardized coefficients for the demographic variables and client type. Figure 1 presents the relationships between all the unstandardized coefficients for the predictor variable (client type) and the criterion variables (circumstances, motivation, readiness).

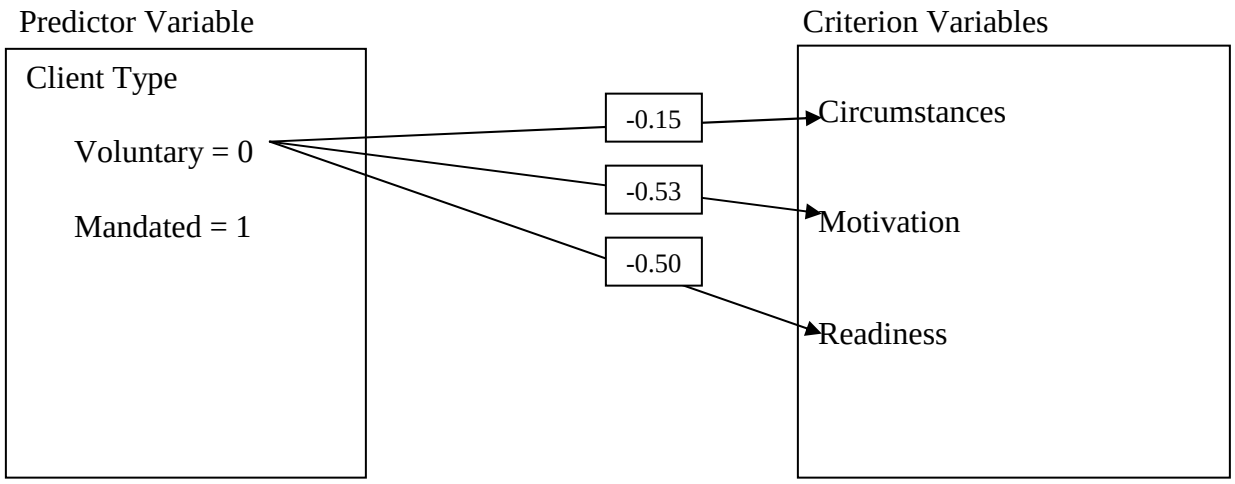
Table 10

Unstandardized Coefficients for Client Type (Voluntary vs. Mandated) Predicting Readiness after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.47
Age	0.02
African American vs. other	0.07
Married vs. other	-0.02
Less than high school education vs. other	0.18
Number of children	-0.05
Block 2	
Gender	0.34
Age	0.01
African American vs. other	0.01
Married vs. other	0.01
Less than high school education vs. other	0.17
Number of children	-0.04
Client type (voluntary vs. mandated)	-0.50

Figure 1

Relationships between all Unstandardized Coefficients for Predictor Variable (Client Type) and Criterion Variables (Circumstances, Motivation, Readiness)



Hypothesis 2 -- There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and referral type (DTAP referral vs. TASC referral).

To examine hypothesis 2, multiple regressions were conducted to assess if referral type (DTAP referral vs. TASC referral) predicts treatment readiness (circumstances, motivation and readiness) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The first regression examined circumstances. The demographic variables were entered into the first block of the regression and the predictor variable (referral type: DTAP referral vs. TASC referral) was entered into the second block of the regression with the demographic variables. The final model explained 38.0% of the variation in circumstances.

The results showed all the predictors in the model contributed to circumstances, including the demographic covariates. Of the variables in the model, in terms of absolute

value, gender made the strongest unique contribution (*B* = -0.63), followed by race (*B* = 0.45), education (*B* = 0.31); and marital status (*B* = -0.26). These variables provided more of a contribution for circumstances than referral type (*B* = 0.13) where a higher level of agreement on circumstances was associated with those referred by TASC as compared to those who were referred by DTAP. Table 11 presents the unstandardized coefficients for the demographic variables and referral type.

Table 11

Unstandardized Coefficients for Referral Type (DTAP vs. TASC) Predicting Circumstances after controlling for Demographics

Model	*B*
Block 1	
Gender	-0.63
Age	0.04
African American vs. other	0.44
Married vs. other	-0.31
Less than high school education vs. other	0.30
Number of children	-0.06
Block 2	
Gender	-0.63
Age	0.04
African American vs. other	0.45
Married vs. other	-0.26
Less than high school education vs. other	0.31
Number of children	-0.07
DTAP vs. TASC	0.13

The second regression examined motivation. The demographic variables were entered into the first block of the regression and the predictor variable (referral type:

DTAP referral vs. TASC referral) was entered into the second block of the regression with the demographic variables. The final model explained 35.9% of the variation in motivation.

The results showed that all the predictors in the model contributed to motivation, including the demographic covariates. Of the variables in the model, age made the strongest unique contribution (B = 1.21), in terms of absolute value, followed by marital status (B = -0.54), and referral type (B = -0.28), which provided more of a contribution than education level. A higher level of agreement on motivation was associated with those referred by DTAP as compared to those who were referred by TASC. Table 12 presents the unstandardized coefficients for the demographic variables and referral type.

Table 12

Unstandardized Coefficients for Referral Type (DTAP vs. TASC) Predicting Motivation after Controlling for Demographics

Model	*B*
Block 1	
Gender	1.17
Age	0.07
African American vs. other	-0.07
Married vs. other	-0.44
Less than high school education vs. other	0.08
Number of children	-0.11
Block 2	
Gender	1.21
Age	0.07
African American vs. other	-0.11
Married vs. other	-0.54
Less than high school education vs. other	0.07
Number of children	-0.10
DTAP vs. TASC	-0.28

The third regression examined readiness. The demographic variables were entered into the first block of the regression and the predictor variable (referral type: DTAP referral vs. TASC referral) was entered into the second block of the regression with the demographic variables. The final model explained 14.6% of the variation in readiness.

The results showed that all the predictors in the model contributed to readiness, including the demographic covariates. In terms of magnitude, referral type provided the largest unique contribution (B = -0.67) to readiness; a higher level of agreement on readiness was associated with those referred by DTAP as compared to those who were

referred by TASC. Race (B = 0.46), education level (B = 0.16), and gender (B = 0.14) followed in terms of magnitude of contribution. Table 13 presents the unstandardized coefficients for the demographic variables and referral type. Figure 2 presents the relationships between all the unstandardized coefficients for the predictor variable (referral type) and the criterion variables (circumstances, motivation, readiness).

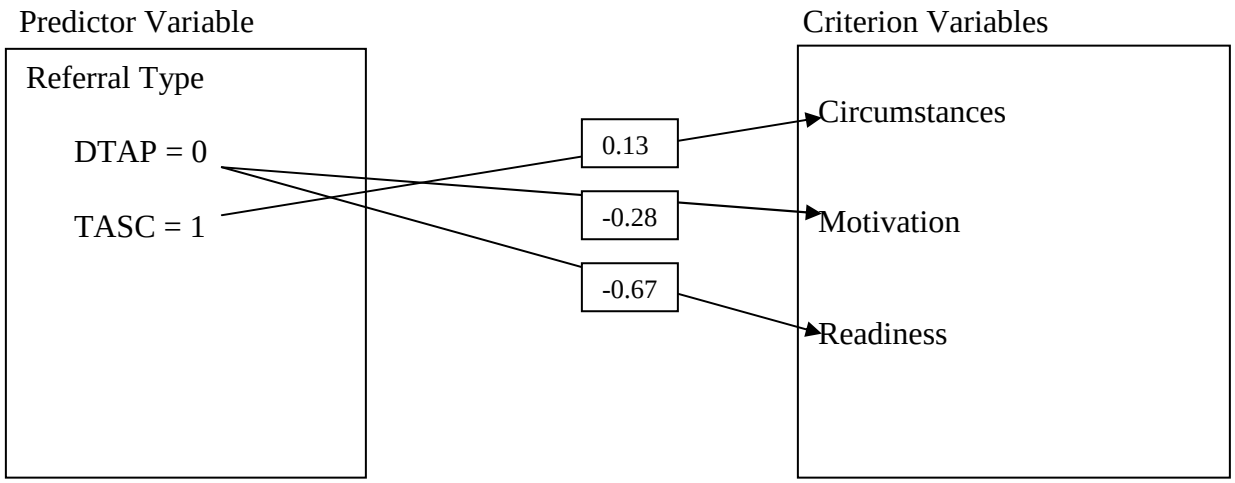
Table 13

Unstandardized Coefficients for Referral Type (DTAP vs. TASC) Predicting Readiness after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.11
Age	0.02
African American vs. other	0.51
Married vs. other	0.21
Less than high school education vs. other	0.12
Number of children	-0.09
Block 2	
Gender	0.14
Age	0.02
African American vs. other	0.46
Married vs. other	-0.07
Less than high school education vs. other	0.16
Number of children	-0.07
DTAP vs. TASC	-0.67

Figure 2

Relationships between all Unstandardized Coefficients for Predictor Variable (Referral Type) and Criterion Variables (Circumstances, Motivation, Readiness)



Hypothesis 3a—There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and drug treatment history (no vs. yes).

To examine hypothesis 3a, multiple regressions were conducted to assess if drug treatment history (no vs. yes) has a relationship with treatment readiness (circumstances, motivation and readiness) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The first regression examined circumstances. The demographic variables were entered into the first block of the regression and the predictor variable (drug treatment history: no vs. yes) was entered into the second block of the regression with the demographic variables. The final model explained 10.5% of the variation in circumstances.

The results showed that all the predictors in the model contributed to circumstances, including the demographic covariates. In terms of magnitude, drug

treatment history provided the largest contribution for circumstances (B = 0.30); a higher level of agreement on circumstances was associated with those who had drug treatment history as compared to those without drug treatment history. This was followed by education level (B = 0.23) and marital status (B = -0.21). Gender and race provided the least contribution in the final model. Table 14 presents the unstandardized coefficients for the demographic variables and drug treatment history.

Table 14

Unstandardized Coefficients for Drug Treatment History (No vs. Yes) Predicting Circumstances after controlling for Demographics

Model	*B*
Block 1	
Gender	-0.09
Age	0.01
African American vs. other	0.02
Married vs. other	-0.20
Less than high school education vs. other	0.21
Number of children	0.01
Block 2	
Gender	-0.05
Age	0.01
African American vs. other	0.06
Married vs. other	-0.21
Less than high school education vs. other	0.23
Number of children	0.01
Drug treatment history (no vs. yes)	0.30

The second regression examined motivation. The demographic variables were entered into the first block of the regression and the predictor variable (drug treatment

history: no vs. yes) was entered into the second block of the regression with the demographic variables. The final model explained 17.0% of the variation in motivation.

The results showed that all the predictors in the model contributed to motivation, including the demographic covariates. Of the variables in the model, gender made the strongest unique contribution ($B = 0.84$), in terms of magnitude, followed by education level ($B = 0.43$). Prior drug treatment provided the third least contribution to motivation ($B = 0.17$); a higher level of agreement on motivation was associated with those who had prior drug treatment as compared to those who did not. Table 15 presents the unstandardized coefficients for the demographic variables and drug treatment history.

Table 15

Unstandardized Coefficients for Drug Treatment History (No vs. Yes) Predicting Motivation after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.82
Age	0.03
African American vs. other	0.08
Married vs. other	-0.01
Less than high school education vs. other	0.41
Number of children	-0.09
Block 2	
Gender	0.84
Age	0.03
African American vs. other	0.09
Married vs. other	-0.02
Less than high school education vs. other	0.43
Number of children	-0.09
Drug treatment (no vs. yes)	0.17

The third regression examined readiness. The demographic variables were entered into the first block of the regression and predictor variable (drug treatment history: no vs. yes) was entered into the second block of the regression with the demographic variables. The final model explained 8.3% of the variation in readiness.

The results showed that as a whole the predictors in the model contributed to the prediction of readiness, including the demographic covariates. Of the variables in the model, in terms of absolute value, gender made the strongest unique contribution (B = 0.48), followed by education level (B = 0.19). In terms of magnitude, prior drug treatment provided the third smallest unique contribution (B = 0.04), only above marital status. A higher average level of agreement on readiness was associated with those who had prior drug treatment. Table 16 presents the unstandardized coefficients for the demographic variables and drug treatment history. Figure 3a presents the relationships between all the unstandardized coefficients for the predictor variable (drug treatment history) and the criterion variables (circumstances, motivation, readiness).

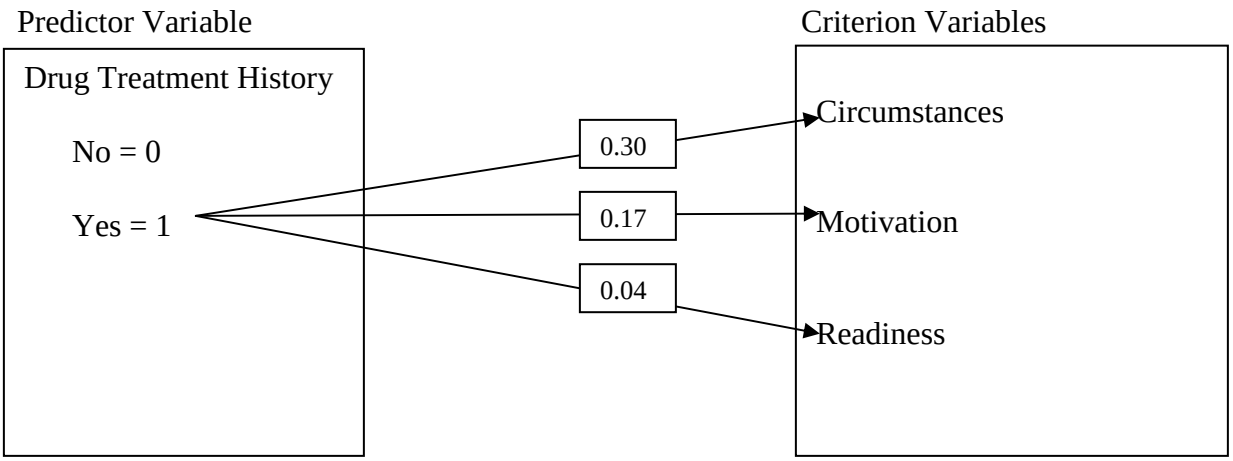
Table 16

Unstandardized Coefficients for Drug Treatment History (No vs. Yes) Predicting Readiness after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.47
Age	0.02
African American vs. other	0.07
Married vs. other	-0.02
Less than high school education vs. other	0.18
Number of children	-0.05
Block 2	
Gender	0.48
Age	0.02
African American vs. other	0.07
Married vs. other	-0.02
Less than high school education vs. other	0.19
Number of children	-0.05
Prior drug treatment (no vs. yes)	0.04

Figure 3a

Relationships between all Unstandardized Coefficients for Predictor Variable (Drug Treatment History) and Criterion Variables (Circumstances, Motivation, Readiness)



Hypothesis 3b-- There is a relationship between treatment readiness, as measured by the CMR Factor Scales Intake Version and criminal justice history (no vs. yes).

To examine hypothesis 3b, multiple regressions were conducted to assess if criminal justice history (no criminal justice history vs. criminal justice history) has a relationship with treatment readiness (circumstances, motivation and readiness) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). The first regression examined circumstances. The demographic variables were entered into the first block of the regression and the predictor variable (criminal justice history: no vs. yes) was entered into the second block of the regression with the demographic variables. The final model explained 5.4% of the variation in circumstances.

The results showed that as a whole the predictors in the model added something to the prediction of circumstances, including the demographic covariates. Of the variables in the model, education level provided the strongest unique contribution (*B* = 0.21), in terms of magnitude, in explaining circumstances, followed by marital status (*B* = -0.19) and gender (*B* = -0.10). No criminal justice history provided the second least contribution for circumstances (*B* = -0.03), above race. A higher level of agreement was noted on circumstances for those without criminal justice history. Table 17 presents the unstandardized coefficients for the demographic variables and criminal justice history.

Table 17

Unstandardized Coefficients for Criminal Justice History (No vs. Yes) Predicting Circumstances after controlling for Demographics

Model	*B*
Block 1	
Gender	-0.09
Age	0.01
African American vs. other	0.02
Married vs. other	-0.20
Less than high school education vs. other	0.21
Number of children	0.01
Block 2	
Gender	-0.10
Age	0.01
African American vs. other	0.02
Married vs. other	-0.19
Less than high school education vs. other	0.21
Number of children	0.01
Criminal justice history (no vs. yes)	-0.03

The second regression examined motivation. The demographic variables were entered into the first block of the regression and the predictor variable (criminal justice history: no vs. yes) was entered into the second block of the regression with the demographic variables. The final model explained 21.8% of the variation in motivation.

The results showed that all the predictors in the model added something to the prediction of motivation, including the demographic covariates. Of the variables in the model, gender provided the greatest contribution for motivation (B = 0.65), in terms of absolute value. No criminal justice history provided the second greatest contribution for motivation (B = -0.52); a higher level of agreement was associated with motivation for those with no criminal justice involvement. Age, race and marital status provided the least contributes to motivation. Table 18 presents the unstandardized coefficients for the demographic variables and criminal justice history.

Table 18

Unstandardized Coefficients for Criminal Justice History (No vs. Yes) Predicting Motivation after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.82
Age	0.03
African American vs. other	0.08
Married vs. other	-0.01
Less than high school education vs. other	0.41
Number of children	-0.09
Block 2	
Gender	0.65
Age	0.03
African American vs. other	0.07
Married vs. other	0.05
Less than high school education vs. other	0.38
Number of children	-0.07
Criminal justice history (no vs. yes)	-0.52

The third regression examined readiness. The demographic variables were entered into the first block of the regression and the predictor variable (criminal justice history: yes vs. no) was entered into the second block of the regression with the demographic variables. The final model explained 12.2% of the variation in readiness.

The results showed that all the predictors in the model added something to the prediction of readiness, including the demographic covariates. Of the variables in the model, in terms of absolute value, no criminal justice history made the strongest unique contribution (B = -0.40); a higher level of agreement on readiness was associated with

those without criminal justice involvement. This was followed by gender ($B = 0.35$) and education level ($B = 0.15$). Marital status and race provided the least contribution to readiness. Table 19 presents the unstandardized coefficients for the demographic variables and criminal justice history. Figure 3b presents the relationships between all the unstandardized coefficients for the predictor variable (criminal justice history) and the criterion variables (circumstances, motivation, readiness).

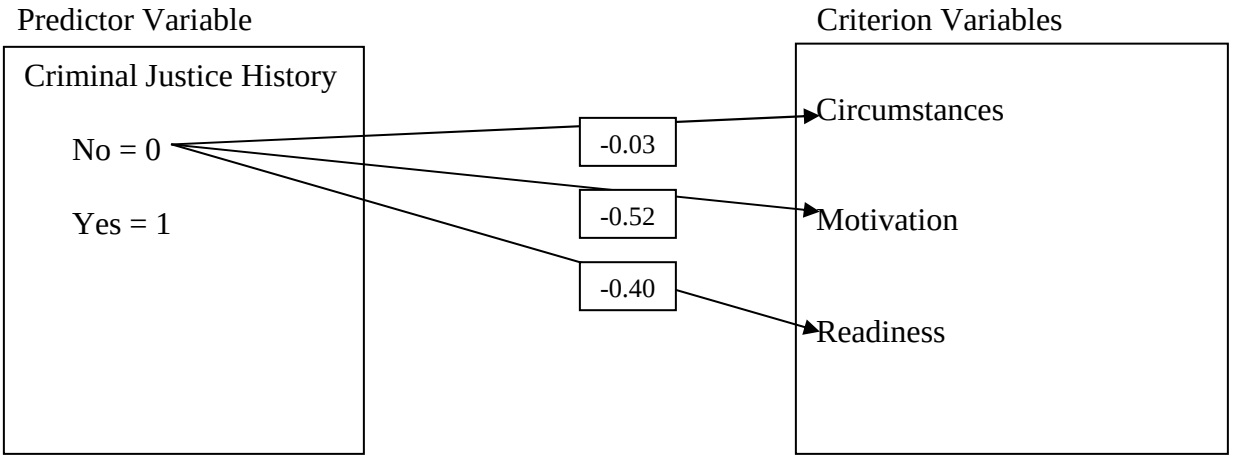
Table 19

Unstandardized Coefficients for Criminal Justice History (No vs. Yes) Predicting Readiness after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.47
Age	0.02
African American vs. other	0.07
Married vs. other	-0.02
Less than high school education vs. other	0.18
Number of children	-0.05
Block 2	
Gender	0.35
Age	0.02
African American vs. other	0.06
Married vs. other	0.01
Less than high school education vs. other	0.15
Number of children	-0.03
Criminal justice history (no vs. yes)	-0.40

Figure 3b

Relationships between Unstandardized Coefficients for Predictor Variable (Criminal Justice History) and Criterion Variables (Circumstances, Motivation, Readiness)



Hypothesis 4—There is a relationship between client type (voluntary vs. mandated), referral source (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) and treatment readiness, as measured by the CMR Factor Scales Intake Version.

To examine hypothesis 4, multiple regressions were conducted to investigate whether or not client type (voluntary vs. mandated) referral type (DTAP vs. TASC), drug treatment history (no vs. yes) and criminal justice history (no vs. yes) predict treatment readiness (circumstances, motivation, and readiness) while controlling for the demographic variables (gender, age, race, education, marital status and number of children). For models with the criterion variables of circumstances, motivation and readiness, the predictor criminal justice history was not included in the analysis. Also,

the predictor client type was included in the predictive model for circumstances, but not in the predictive model for motivation and readiness.

The first regression examined circumstances. The demographic variables were entered into the first block of the regression and the predictor variables (referral type, drug treatment history) were entered into the second block of the regression with the demographic variables. The final model explained 44.7% of the variation in circumstances. The results showed that all the predictors in the model added something to the prediction of circumstances, including the demographic covariates. Of the variables in the model, gender made the strongest unique contribution (B = -0.76), followed by race (B = 0.46) and marital status (B = -0.37). In terms of magnitude, no prior drug treatment history provided a greater contribution to circumstances (B = -0.35) than referral type (TASC) (B = 0.08) that provided less contribution than education level (B = 0.12). Table 20 presents the unstandardized coefficients for the demographic variables and the predictor variables.

Table 20

Unstandardized Coefficients for Referral Type and Drug Treatment History Predicting Circumstances after Controlling for Demographics

Model	*B*
Block 1	
Gender	-0.63
Age	0.04
African American vs. other	0.44
Married vs. other	-0.31
Less than high school education vs. other	0.30
Number of children	-0.06
Block 2	
Gender	-0.76
Age	0.03
African American vs. other	0.46
Married vs. other	-0.37
Less than high school education vs. other	0.12
Number of children	-0.04
DTAP vs. TASC	0.08
Drug treatment history (no vs. yes)	-0.35

The second regression examined motivation. The demographic variables were entered into the first block of the regression and the predictor variables (client type, referral type, drug treatment history) were entered into the second block of the regression with the demographic variables. The final model explained 44.8% of the variation in motivation.

The results showed that all the predictors in the model added something to the prediction of motivation, including the demographic covariates. Of the variables in the model, in terms of absolute value, gender made the strongest unique contribution (*B* =

1.13), followed by drug treatment history (*B* = -0.80). A higher level of agreement on motivation was associated with those who did not have a drug treatment history. Referral type (DTAP) provided more of a contribution to motivation (*B* = -0.43) than client type (mandated) (*B* = 0.01) which had the lowest unstandardized coefficient in the model. Higher levels of agreement on motivation were associated with those referred by DTAP as compared to those who were referred by TASC, and with those who were mandated clients as compared to voluntary clients. Table 21 presents the unstandardized coefficients for the demographic variables and the predictor variables.

Table 21

Unstandardized Coefficients for Client Type, Referral Type, and Drug Treatment History Predicting Motivation after Controlling for Demographics

Model	*B*
Block 1	
Gender	1.17
Age	0.07
African American vs. other	-0.07
Married vs. other	-0.44
Less than high school education vs. other	0.08
Number of children	-0.11
Block 2	
Gender	1.13
Age	0.05
African American vs. other	0.04
Married vs. other	-0.80
Less than high school education vs. other	-0.30
Number of children	-0.04
Client type (voluntary vs. mandated)	0.01
DTAP vs. TASC	-0.43
Drug treatment history (no vs. yes)	-0.80

The third regression examined readiness. The demographic variables were entered into the first block of the regression and the predictor variables (client type, referral type, drug treatment history) were entered into the second block of the regression with the demographic variables. The final model explained 37.4% of the variation in readiness. The results showed that all the predictors in the model added something to the prediction of readiness, including the demographic covariates. Of the variables in the model, client type provided the greatest contribution for readiness (B = 1.44), in terms of absolute value, followed by drug treatment history (B = -1.09) and referral source (B = -0.82). Higher levels of agreement were found on readiness for mandated clients as compared to voluntary clients, for those without prior drug treatment, and for those were referred by DTAP as compared to TASC. Race, gender, marital status, and education offered less of a contribution than the research variables. Table 22 presents the unstandardized coefficients for the demographic variables and the predictor variables. Figure 4 presents the relationships between all the unstandardized coefficients for the predictor variables (client type, referral type, drug treatment history) and the criterion variables (circumstances, motivation, readiness).

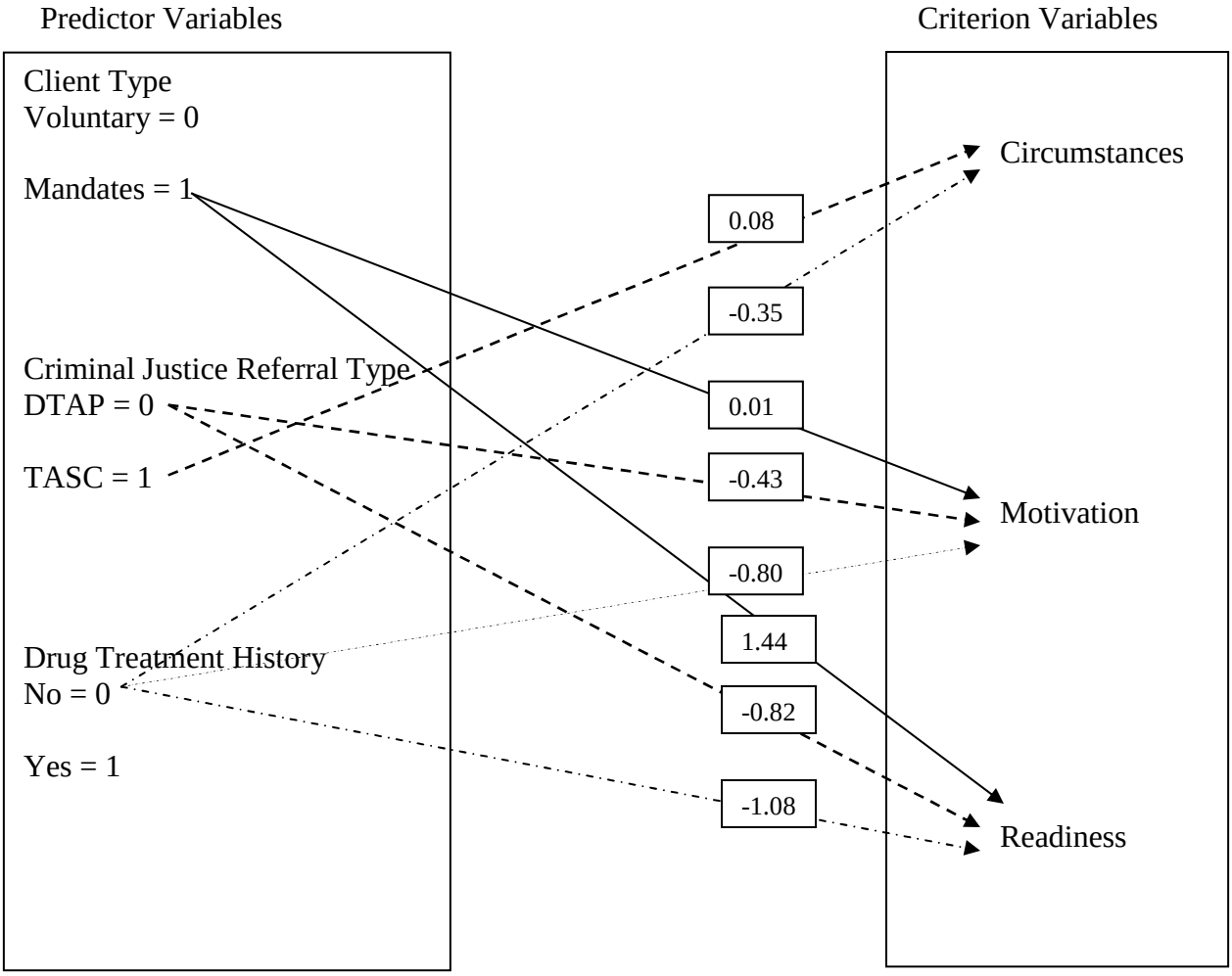
Table 22

Unstandardized Coefficients for Client Type, Referral Type, and Drug Treatment History Predicting Readiness after Controlling for Demographics

Model	*B*
Block 1	
Gender	0.11
Age	0.02
African American vs. other	0.51
Married vs. other	0.21
Less than high school education vs. other	0.12
Number of children	-0.09
Block 2	
Gender	-0.37
Age	0.01
African American vs. other	0.80
Married vs. other	-0.36
Less than high school education vs. other	0.21
Number of children	-0.08
Client type (voluntary vs. mandated)	1.44
DTAP vs. TASC	-0.82
Drug treatment history (no vs. yes)	-1.08

Figure 4

Relationships between all the unstandardized coefficients for the predictor variables (client type, referral type, drug treatment history) and the criterion variables (circumstances, motivation, readiness)



CHAPTER VIII

DISCUSSION

This study was designed to assess treatment readiness among criminal justice clients mandated to drug treatment programs, using the Circumstance, Motivation, and Readiness Scales for Substance Abuse Treatment (CMR Factor Scales Intake Version). This chapter presents an overview of the research findings, discusses the findings in the context of this research, reviews the limitations of the study, and future research directions. The research sought to answer the following questions:

(1) Is there a relationship between treatment readiness and client type?

(2) Is there a relationship between treatment readiness and criminal justice referral type?

(3a) Is there a relationship between treatment readiness and whether clients have drug treatment history?

(3b) Is there a relationship between treatment readiness and whether clients have criminal justice involvement history?

(4) What is the relationship between treatment readiness and client attributes?

Research Question 1—Is there a relationship between treatment readiness and client type?

The results indicated a relationship between treatment readiness and client type (voluntary vs. mandated), as measured by the CRM Factor Scales Intake Version. Client type, voluntary clients, not mandated clients, demonstrated a relationship to treatment readiness on the areas of Circumstances, Motivation, and Readiness. On the Circumstances scale, items such as “I am sure that I would go to jail if I did not come to

treatment" or "I am sure that my family will not let me live at home if I did not come to treatment" are measured to determine circumstances under which clients enter drug treatment. Results indicated voluntary clients had a higher average agreement on circumstances level than mandated clients did. Voluntary clients more so than mandated clients will enter drug treatment under the pressures of family and the fear of going to prison. Mandated clients have less of relationship to these circumstances to entering drug treatment given their current involvement with the criminal justice system.

On the Motivation scale, voluntary clients had a higher average agreement on motivation for drug treatment than mandated clients. The Motivation scale has items such as "It is important to me than anything else that I stop using drugs" which assesses motivation for change. The higher average motivation level for voluntary clients demonstrates more internal motivation for drug treatment than among clients who are mandated to drug treatment.

On the Readiness scale, voluntary clients had a higher average readiness level for drug treatment readiness than mandated clients. The Readiness scale has items such as "Basically, I don't see any other choice for help at this time except some kind of treatment"; and "I am really tired of using drugs and want to change, but I know I can't do it on my own" determines clients' readiness to engage in drug treatment. The relationship between treatment readiness and client type, illustrates that voluntary clients are, on average, more prepared to engage in therapeutic activities necessary to bring about changes in their addictive behaviors. De Leon et al. (2000) and Farabee et al. (1993) noted that mandated clients scored lower on assessment areas of drug use, desire for help, and readiness for treatment. Voluntary clients, unlike mandated clients, have

resolved that drug treatment is necessary to change drug use behaviors. The relationship between treatment readiness and client type also suggests voluntary clients are at the preparation stage in the stages of change model identified by Prochaska and DiClemente (1982). Voluntary clients are focused on activities that bring about behavioral changes where as mandated clients might be considered to be in the precontemplation stage in the stages of change. The precontemplation stage is marked by not being aware of the problem or exhibiting no desire to make any behavioral changes.

Research Question 2—Is there a relationship between treatment readiness and criminal justice referral type?

Results indicate there is a relationship between treatment readiness and criminal justice referral type (DTAP vs. TASC) as measured by the CMR Factor Scales Intake Version. On the Circumstances scale, the results indicated TASC clients', on average, are more likely to be brought to drug treatment than clients who are involved with the DTAP program. TASC clients identified for drug treatment are those who are at risk of becoming progressively involved with the criminal justice system due to drug use. The TASC program seeks to intervene early in the addiction process to interrupt the drug use/prison cycle. Unlike TASC clients, DTAP clients are viewed as having an extensive criminal justice involved history due to their multiple felony convictions for drug activities (Cook & Weinman, 1988; CASA, 2003).

On the Motivation scale, DTAP clients, on average, have a higher level of motivation for drug treatment than TASC clients. DTAP clients were found to be more motivated for drug treatment than TASC clients. Clients who are eligible to participate in DTAP are those who have several drug related arrests and face a mandatory prison

sentence under New York State's second offender law (CASA, 2003). Sung et al. (2004) found DTAP clients demonstrated motivation for drug treatment when they assessed motivation for drug treatment relating to drug use, unemployment, and relationship problems.

On the Readiness scale, results suggested the presence of a relationship between treatment readiness and criminal justice referral type. DTAP referred clients compared to TASC referred clients demonstrated a higher average level of treatment readiness. DTAP referred clients are more likely to be ready to engage in drug treatment activities compared to TASC referred clients. The relationship found between treatment readiness and criminal justice referral type on motivation also has a relationship on the Readiness scale for DTAP clients. The presence of a relationship between treatment readiness and criminal justice referral type highlights the differences between the DTAP and TASC programs. The DTAP program operates on a deferred sentencing model where clients enter into an agreement to participate in drug treatment for a minimum of 18 to 24 months in lieu of their promised sentence (Hynes & Swern, 2005). DTAP clients are informed of the consequences for drug treatment failure, which can result in mandatory prison term due to their repeat drug felony status. The relationship between treatment readiness and criminal justice referral type suggests clients referral by DTAP have approached their involvement with DTAP and participation in drug treatment as possibly their final option to interrupting the drug use/prison cycle.

This relationship also suggests DTAP clients have worked through the "risk-reward" analysis, a hallmark of the preparation stage in the stages of change, with regards to changing their drug use and criminal behaviors. The "risk-reward" analysis requires

clients to identify the risks of their continued drug use and associated criminal activities, and the potential rewards they can enjoy in changing their drug use behaviors. Unlike DTAP clients who might have work through the "risk-reward" analysis and view treatment as the final option, TASC clients might not hold a similar view. TASC clients are more likely have another opportunity to participate in another treatment program should they fail their current program. For TASC clients,the option of an alternate program, makes it likely they will not view their current mandate as their final option, and are less likely to demonstrate readiness for drug treatment (Young, 2002). TASC clients are considered to be in the contemplation stage in the stages of change model because while they have recognized their drug problem, they have not moved forward with bringing about any real changes in their behavior. They remain in the contemplation stage vacillating between whether or not to move forward with changing their behavior. Research Question 3a—Is there a relationship between treatment readiness and whether clients have drug treatment history?

The results indicated a relationship between treatment readiness and drug treatment history (yes vs. no) on the areas of circumstances, motivation, and readiness for drug treatment as measured by the CMR Factor Scales Intake Version. On the Circumstance scale, clients with prior drug treatment history had a higher average agreement than clients with no prior drug treatment history. On the Motivation scale, drug treatment history also demonstrated a relationship to treatment readiness. Clients with prior drug treatment history also had a higher average on agreement on motivation level than clients with no prior drug treatment history. On the Readiness scale, drug treatment history had a relationship to treatment readiness.

Clients with prior drug treatment history showed a higher average agreement on readiness level than clients with no prior drug treatment history. Clients with prior drug treatment history who participated in drug treatment in the past appears to have a higher average readiness level are more likely to enter drug treatment when faced with the crisis of their drug activities becoming unmanageable.

Research Question 3b—Is there a relationship between treatment readiness and whether clients have criminal justice involvement history?

Results indicated a relationship between treatment readiness and criminal justice history (no vs. yes) as measured by the CMR Factor Scales Intake Version. Relationships were found among clients with no criminal justice history on the areas of circumstance, motivation, and readiness. Clients with no prior criminal justice involvement history had a higer average agreement on readiness than clients with criminal justice history did. In a study by Rempel and DeStefano (2001) they found criminal justice involved clients required a greater length of time to complete the treatment process that clients who were not involved with the criminal justice system. The existence of the relationships between treatment readiness and criminal justice history is similar to the relationships found between client type and treatment readiness. Voluntary clients were found to be more ready for drug treatment than mandated clients.

A relationship between treatment readiness and criminal justice involvement history, suggests that clients with no prior criminal justice history are in the preparation stage of change. They have also conducted a "risk-reward" analysis and recognize the need for drug treatment. They have evaluated the pros and cons of their drug behaviors, realizing the risks of continued drug use could lead to involvement with the criminal

justice system. Clients with prior criminal justice history involvement exhibiting no readiness for drug treatment speaks to the lack of awareness they continue to have regarding their drug use. Kelly et al. (2005) found that criminal justice clients failed to identify themselves as drug addicted and in need of drug treatment when assess for drug treatment scoring low on identifying the need for drug treatment. This lack of awareness would suggests that clients with prior criminal justice involvement are in the precontemplation stage in the stages of change and have failed to recognize the on-going dangers of continued drug activities (DiClemente, et al., 1991).

Research Question 4—What is the relationship between treatment readiness and client attributes?

The results indicated a mixed relationship between treatment readiness and the client attributes', client type (voluntary vs. mandated); criminal justice referral type (DTAP vs. TASC); and drug treatment history (no vs. yes). The client attribute criminal justice history (no vs. yes) was not included in the final analysis.

Results indicted a strong relationship between the client attribute client type (voluntary vs. mandated) and treatment readiness. The final analysis of all clients' attributes and the relationship to treatment readiness resulted in opposite findings. Mandated clients showed a higher average motivation level for treatment than voluntary clients, however, the magnitude of difference was not large. Mandated clients were also found to have a higher average treatment readiness level than voluntary clients. See Figure 2.

Results for the client attribute criminal justice referral type (DTAP vs. TASC) and its relationship to treatment readiness were mixed. Results indicated on the

Circumstances scale TASC referred clients demonstrated a higher average level for treatment than DTAP clients. On the of Motivation scale, DTAP clients have a higher average level on motivation for drug treatment than TASC clients. DTAP clients were more motivated for drug treatment than TASC clients; on the Readiness scale DTAP clients also demonstrated a higher average treatment readiness level than TASC clients. These findings are similar to the results when the attribute, criminal justice referral type, was assessed individually. As discussed earlier, regarding reasons for TASC clients having higher average level on circumstances for treatment entry than DTAP clients, is that TASC clients are identified for drug treatment as an early intervention in the cycle of drug use/prison cycle; whereas DTAP clients have several felony convictions before having the opportunity to participate in an ATI program. See Figure 2.

Results indicated relationships were strongest for the client attribute, drug treatment history (no vs. yes), on the areas of motivation and readiness for drug treatment compared to circumstances for drug treatment. Clients with no prior drug treatment history were found have a higher average motivation and treatment readiness level compared to clients with prior drug treatment history. There was a higher agreement on treatment readiness level for clients with no prior drug treatment history compared to those with treatment history. These final analyses of client attributes and its relationship to treatment readiness are found to be different from earlier results where clients with prior drug treatment history demonstrated a higher average to treatment readiness level compared to clients without prior drug treatment history. See Figure 2.

The results from this study indicate that the client attributes with higher average treatment readiness level are clients who are mandated to drug treatment; are referred to

drug treatment by DTAP; and clients who have no prior drug treatment history. A key note to these findings indicate that clients who are mandated and have no prior drug treatment history will have a higher average treatment readiness level than clients who enter voluntarily and have prior drug treatment history. In addition, those referred by the ATI program, DTAP, will also have a higher average treatment readiness level than TASC clients. These findings would suggest that criminal justice programs should intensify the efforts to identify individuals early in the justice system for drug treatment programs. Early interventions and the use of more rigid consequences such as those utilized by the DTAP program will support the efforts to reduce the prison system with non-violent drug offenders and interrupt the drug use/criminal justice involvement early.

Study Limitations

The purpose of the research was to assess treatment readiness for drug treatment among drug-abusing clients mandated to drug treatment by the criminal justice system. However, the findings of this research have some limitations. First, the population selected for this research was identified through convenience sampling using one location, a residential drug-free program. The use of convenience sampling does not offer a true representation of the larger population of clients in residential drug treatment programs. The researcher was limited in the ability to recruit participants from additional residential drug treatment programs in New York City. Additional residential drug treatment programs would have provided a more representative sample of mandated clients in such programs.

Another limitation was that the research findings are limited to the research population used in the study. The research included only participants who were able to

read and comprehend English. The data collection tools including all relevant consent forms were available only in English. Research data collection instruments were not translated into to Spanish, and therefore, eliminating potential Spanish-speaking participants who might have been able to participate in the research and limiting the research sample size. The research is limited by the final research population size. The final population size was 139 and included a limited portion of mandated clients enrolled in the drug treatment program. The research sample included a limited number of participants from DTAP and TASC criminal justice programs. The use of convenience sampling and the limitation of one residential drug treatment site restricted the researcher's ability to achieve the desired sample size of mandated clients. The research findings are limited to clients in the research. The opportunity to include additional drug treatment programs or recruit criminal justice clients from drug treatment programs would have allowed for a larger sample of criminal justice clients.

Implications for Future Research

Despite the research limitations, the findings have implications for social work practice and future research for criminal justice clients mandated to drug treatment. The policy of mandating clients to community-based drug treatment programs requires that treatment providers conduct early assessment for treatment readiness to ensure appropriate intervention. Interventions available to treatment providers include Motivational Interviewing (Miller & Rollnick, 2002). Motivational Interviewing is used to enhance and facilitate internal motivation to change. It focuses on moving the individual along from a resistant or non-engaging stage to one of active participation, and to ensure benefits from the treatment episode (Miller & Rollnick, 2002). Early

assessment of mandated clients maximizes the use of limited resources available to drug treatment programs. The ability to apply specific clinical interventions at the appropriate stage of treatment requires providers to know the current stages of change of mandated clients are in. Motivational Interviewing is generally used in an individual setting; however, a group approach presents the advantage of meeting the treatment needs of larger number of clients at a reduced cost. Lincourt et al (2002) using a group approach with Motivational Interviewing among mandated clients unable to identify treatment goals, found that those who participated in motivational interviewing sessions were more likely to complete their treatment goals. The group approach also allows for vicarious learning and modeling, and has the potential for promoting positive supports for peers. Assessing treatment readiness early in the treatment process also contributes to forging the therapeutic alliance between client and counselor to promote changes.

The research findings indicated that clients with no prior drug treatment history demonstrate readiness for drug treatment. Drug treatment providers must be able to identify appropriate services for clients that enhance and support the readiness for drug treatment for those who have no experience with this therapeutic process. For clients who are mandated to treatment moving them along the continuum of treatment readiness can include using the source of the pressure to enter treatment. For mandated clients, treatment providers can make use legal pressure as an impetus to support movement. Knowledge of the kind of clients to enter drug treatment will allow treatment providers to engage clients early in the treatment process. Early engagement will enable providers to offer maximum intervention, i.e., to offer stage-matched interventions to support the movement from one stage of change to the next. Stage-matched interventions are

specific to the client's current stages in their movement through the stages of change. Program activities geared toward clients who are in the precontemplation would be different from clients who are in the contemplation or preparation. For example, clients in the precontemplation stage would not benefit from action-orientated activities geared for clients in the preparation stage. Precontemplators have not yet recognize their drug problem and might be overwhelmed by such action-orientated activities (Miller & Rollnick, 2002). Activities more appropriate for clients in the contemplation stage are those involving cognitive processes such as consciousness-raising, highlighting the dangers of addiction such as the impact on family and friends, loss of employment, and involvement with the criminal justice system.

The findings of this research have implications for future studies to increase the knowledge of the criminal justice population mandated to drug treatment. To expand on this research and to increase knowledge on the criminal justice client mandated to drug treatment, future research should consider the following: increase of sample size. A larger sample size should include a larger representation of clients from criminal justice programs such as DTAP, TASC, and Drug Courts. Expanded research on treatment readiness among criminal justice clients mandated to drug treatment programs is important as alternatives policies continue to find ways to break the cycle between drug use and prison. As noted earlier, the Drug and Alcohol Services Information System (DAIS, 2004) indicated that between 1992 and 2001 referrals to drug treatment programs increased by 32%. In addition, the recent changes to the Rockefeller Drug Laws call for the expansion of ATI programs to provide more opportunities for drug offenders to benefit from treatment rather than prison. Community-based drug treatment programs

will serve to break the drug use/prison cycle but also serve as a cost-saver in sending individuals to drug treatment rather than to prisons.

Appendix A

Reasons for Drug Treatment Entry

Instructions to Admissions Counselor

Please read both paragraphs below to each new client during the intake process. Please do not deviate from the script below. Read the script exactly as written to each new client. Where indicated in the paragraph, please provide each new client with a recruitment flyer provided by the researcher. If there are additional questions from the client, please re-read the first paragraph to the client and you can instruct them the researcher will answer any additional questions.

TO BE READ TO EACH NEW CLIENT DURING INTAKE

There is a research project that you can take part in. This research is to find out why people enter drug treatment programs. Knowing these reasons could help the program provide better services for clients. These better services might be new groups or new orientation sessions.

Here is a flyer about the research and the person you can contact if you are interested (**GIVE FLYER TO CLIENT**). It is voluntary and if you decide not to participate it will not affect your treatment. The agency that referred you, if one did, will not be told about the research.

Appendix B

WE WANT TO KNOW THE REASON YOU ENTERED DRUG TREATMENT

Why do we want to know this? – Because:

- ❖ It could help the program provide better services for clients
- ❖ It could help clients have a successful treatment

IF THIS SOUNDS INTERESTING AND YOU WANT TO PARTICIPATE

- ❖ Must have entered treatment within the past 30days
- ❖ Must be able to read and speak English
- ❖ It will take only 45 minutes
- ❖ Participation is **VOLUNTARY** and will not affect your treatment
- ❖ All information is confidential

STILL INTERESTED?????

CALL
Valrie Fowler
City University of New York Graduate Center
Hunter College School of Social Work
347-622-3694

Participation is **VOLUNTARY** and will not affect your treatment process and all information is confidential

Appendix C

CONSENT TO PARTICIPATE
Reasons for Drug Treatment Entry

Purpose and Background

Valrie Fowler is a graduate student in the Social Welfare Department at the City University of New York. She is conducting a research to understand the reasons for drug treatment entry. You are being asked to participate in a research that looks at the reasons individuals enter drug treatment programs. You have been identified as a possible participant because you are a new client to the drug treatment program and you are over the age of 18. It is anticipated that 210 individuals will participate in this research. Participation in this research is voluntary, and refusal to participate will involve no penalty or affect your treatment process.

Procedures

You are being asked to complete the Client Demographic/Psychosocial and the Circumstance Motivation Readiness (CMR) Factor Scale Intake Version forms. You will be asked to complete the forms in a private room within the facility. The entire process will take approximately 45 minutes.

Risks and/or Discomforts

There is minimal risk to participating in this research. This research may raise some uncomfortable issues relating to past drug treatment and past drug related activities. In the event that is happens, the researcher has a list of resources that you may contact for assistance should you need them. You can choose not to answer any particular question. You may also stop answering the questions on the forms at any time.

Benefits

Participating in this research provides no direct benefit. However, your participation will provide valuable information to understanding reasons for entering drug treatment programs. This information could help drug treatment programs develop better client services. A summary of the results from the research will be provided upon request.

Alternatives

There are no alternative procedures for this research.

Financial Considerations

There is no payment for participating in this research.

Privacy and Confidentiality

The information will be collected from the Client Demographic/Psychosocial and the CMR Factor Scale Intake Version forms. You will be given a separate form to indicate your permission. No one but the researcher and her faculty advisor will read both forms. Both forms will use identifying codes. Your name will not be recorded. No personal identifies will be linked to the data. All materials will be kept in a locked file cabinet in the researcher's personal office to which only the researcher will have access. The data will be stored for a minimum of three years. After that all materials may be destroyed. Only aggregate data will be reported in any reports or publications derived from this research. All identifying information about you and others who participated will be omitted or disguised. The researcher is mandated to report to the proper authorities suspected child abuse, and any indication that you are in imminent danger of harming yourself or others.

Withdrawal

You may discontinue participation at any time without penalty or fear of treatment process being affected.

Contact Information

If you have any questions about the research, you can contact the researcher, Valrie Fowler at (347) 622-3694 or her faculty advisor Dr. Darrell Wheeler at (212) 452-7491. You should contact the Hunter College IRB Office at (212) 650-3503, if you have questions regarding your rights as a subject or if you feel you have been harmed as a result of your participation in this research.

Signatures

I have read (or have read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions. I will continue to receive treatment services whether I agree to participate or not. I may refuse to answer any question I want. I give my consent to participate in this research. I have received a copy of this form for my records and future reference.

_____	_____	_____
Participant's Name	Signature	Date

_____	_____	_____
Researcher's Name	Signature	Date

Appendix D

HIPPA Research Authorization

CUNY INSTITUTIONAL REVIEW BOARD

HIPAA RESEARCH AUTHORIZATION

Subject/Client/Patient Name: _____ **ID Number:** _____

Study: Reason for Drug Treatment Entry

IRB Protocol No. HC-040911441 **CUNY Institution:** City University of New York

We understand that information about you and your health is personal. We are committed to protecting the privacy of that information. Federal regulations and our commitment to your privacy require that we obtain your written authorization before we may use or disclose your protected health information for the research purposes described below. This form provides that authorization and helps us make certain that you are properly informed of how this information will be used or disclosed. Please read the information below carefully before signing this form.

USE AND DISCLOSURE COVERED BY THIS AUTHORIZATION

Valrie Fowler must answer these questions completely before providing this authorization form to you. DO NOT SIGN A BLANK FORM. You or your personal representative should read the descriptions below before signing this form.

What information will be used or disclosed for the research? The appropriate boxes should be checked below and the descriptions should be in enough detail so that you (or any organization that will use or disclose information pursuant to this authorization) can understand what information may be used or disclosed.

☒ Any medical, treatment, or research records held by Palladia, Inc. may be used and/or disclosed.

☒ The following information:

Client demograhic information, primary and secondary drug, prior drug treatment , length of stay in previous drug treatment, drug treatment modality, criminal justice involvement, drug related arrets, and legal referral for drug treatment.

Who will disclose, receive, and/or use the information while it is in individually identifiable form? This research authorization form will authorize the following person(s), class (es) of persons, and/or organization(s) to disclose, use, and/or receive the information in connection with the research:

☒ Valrie Fowler and his or her research staff, which may include Hunter College School of Social Work students

☐ The following co-investigators and members of their research staffs: [list names and institutions]

☒ Statisticians at the following institutions: [Hunter College School of Work]

☒ The members and staff of the Hunter College School of Social Work Institutional Review Board and other CUNY officials and staff who oversee research

☐ Government authorities or agencies that oversee research

☐ The members and staff of the Institutional Review Boards at participating research sites [list each co-investigator's site]

☒ Others (as described below):

Faculty Advisor, Dr. Darrell Wheeler

If not specifically listed above, you also authorize the following persons or institutions that maintain records about you to disclose the information described above for the purpose of this research:

Palladia, Inc.

SPECIFIC UNDERSTANDINGS

By signing this research authorization form, you authorize the use and/or disclosure of your protected health information as described above. The purpose for the uses and disclosures you are authorizing is to conduct the research project explained to you during the informed consent process and to ensure that the information relating to that research is available to all parties who may need it for research purposes.

Many of the recipients listed in this form have legal or professional obligations to protect the confidentiality of your information. If, however, your information is disclosed to persons or

organizations that are not required by state or federal law to protect the privacy of the information, such persons or organizations could reuse or redisclose the information without penalty under those laws. For this reason, it is the policy of the [Hunter College] IRB that investigators ask all recipients of your information to agree to treat your information as confidential.

You have a right to refuse to sign this authorization. Your health care, the payment for your health care, and your health care benefits will not be affected if you do not sign this form.

If you sign this authorization, you will have the right to revoke it at any time. However, your revocation would not apply to the extent that Valrie Fowler and the investigators in this research have already taken action based upon your authorization or need the information to complete analysis and reports of data for this research. This authorization will never expire unless and until you revoke it. To revoke this authorization, please write to Valrie Fowler c/o Dr. Darrell Wheeler Hunter College 129 East 79th Street New York, NY 10075.

A copy of this form will be provided to you after you have signed it.

SIGNATURE

I have read this form and all of my questions about this form have been answered. I understand that, if I have questions about this form in the future, they will also be answered. By signing below, I acknowledge that I have read and accept all of the above.

_____
Signature of Subject or Personal Representative

_____
Print Name of Subject or Personal Representative

_____
Date

_____
Description of Personal Representative's Authority

CONTACT INFORMATION

The contact information of the subject or personal representative who signed this form should be filled in below.

Address:

_____

_____

_____

_____

Telephone:

_____ (daytime)

_____ (evening)

Email Address (optional):

_____

THE SUBJECT OR HIS OR HER PERSONAL REPRESENTATIVE MUST BE PROVIDED WITH A COPY OF THIS FORM AFTER IT HAS BEEN SIGNED.

CTCR
CENTER FOR THERAPEUTIC COMMUNITY RESEARCH

CIRCUMSTANCES, MOTIVATION, and READINESS SCALES for SUBSTANCE ABUSE TREATMENT

CMR FACTOR SCALES
Intake Version

CLIENT ID NUMBER .....(___/___/___/___/___/___/___/___) (1-8)

CLIENT GENDER ..... (___) (9)
1=Male 2=Female

CLIENT ETHNICITY ..... (___) (10)
1=African American 2=Hispanic 3=White 4=Other

CLIENT AGE ..... (___/___) (11-12)

PRIMARY DRUG ..... (___/___) (13-14)
1=Non-crack cocaine
2=Crack
3=Opiates
4=Marijuana
5=Alcohol
6=Poly Drug
8=Other

TREATMENT MODALITY ..... (___/___) (15-16)
1=Drug Free Outpatient
2=Day Treatment
3=Methadone Maintenance
4=Short Term Residential
5=Long Term Residential
6=No Treatment Entered
7=Detoxification Only
8= Detoxification as Entry into Treatment
9=Hospital Inpatient
10=Referral Center
11=Other

DATE OF ADMINISTRATION .....(___/___/___/___/___/___) (17-22)

FOR CTCR USE ONLY. PLEASE LEAVE BLANK.

INSTRUMENT VERSION..... (___) (23)

PROGRAM NUMBER..... (___/___) (24-25)

How you feel can have a powerful effect on treatment. These feelings include your circumstances, the problems in your life, your feelings about yourself, and your feelings about treatment. Carefully consider each of the questions below and indicate how closely they describe your own thoughts and feelings.

Circle the number that best describes your response.

1 Strongly Disagree	2 Disagree	3 Neither Agree or Disagree	4 Agree	5 Strongly Agree	9 Not Applicable

CIRCUMSTANCES

1.	I am sure that I would go to jail if I didn't enter treatment.	1----2----3----4----5----9	___ (26)
2.	I am sure that I would have come to treatment without the pressure of my legal involvement.	1----2----3----4----5----9	___ (27)
3.	I am sure that my family will not let me live at home if I did not come to treatment.	1----2----3----4----5----9	___ (28)
4.	I believe that my family/relationship will try to make me leave treatment after a few months.	1----2----3----4----5----9	___ (29)
5.	I am worried that I will have serious money problems if I stay in treatment.	1----2----3----4----5----9	___ (30)
6.	Basically, I feel I have too many outside problems that will prevent me from completing treatment (parents, spouse/relationship, children, loss of job, loss of income, loss of education, family problems, loss of home/place to live, etc.).	1----2----3----4----5----9	___ (31)

MOTIVATION

7.	Basically, I feel that my drug use is a very serious problem in my life.	1----2----3----4----5----9	___ (32)
8.	Often I don't like myself because of my drug use.	1----2----3----4----5----9	___ (33)
9.	Lately, I feel if I don't change, my life will keep getting worse.	1----2----3----4----5----9	___ (34)
10.	I really feel bad that my drug use and the way I've been living has hurt a lot of people.	1----2----3----4----5----9	___ (35)
11.	It is more important to me than anything else that I stop using drugs.	1----2----3----4----5----9	___ (36)

1 Strongly Disagree	2 Disagree	3 Neither Agree or Disagree	4 Agree	5 Strongly Agree	9 Not Applicable

READINESS

12.	I don't really believe that I have to be in treatment to stop using drugs, I can stop anytime I want.	1----2----3----4----5----9	___ (37)
13.	I came to this program because I really feel that I'm ready to deal with myself in treatment.	1----2----3----4----5----9	___ (38)
14.	I'll do whatever I have to do to get my life straightened out.	1----2----3----4----5----9	___ (39)
15.	Basically, I don't see any other choice for help at this time except some kind of treatment.	1----2----3----4----5----9	___ (40)
16.	I don't really think I can stop my drug use with the help of friends, family or religion, I really need some kind of treatment.	1----2----3----4----5----9	___ (41)
17.	I am really tired of using drugs and want to change, but I know I can't do it on my own.	1----2----3----4----5----9	___ (42)
18.	I'm willing to enter treatment as soon as possible.	1----2----3----4----5----9	___ (43)

Appendix F

Client Demographic/Psychosocial

FOR RESEARCHER ONLY. DO NOT COMPLETE

Client ID#_____ Treatment Modality_____

YOUR PARTICIPATION IS VOLUNTARY

Please answer the questions below about yourself. If there are any questions you do not wish to answer, you can leave it blank.

1. Date of Admission_____

2. Gender
_____Male
_____Female

3. Age_____

4. Race
_____African American/Black
_____Hispanic/Latino
_____White
_____Other

5. Martial Status
_____Never Married
_____Married
_____Separated
_____Divorce
_____Widow

6. Number of Children_____

7. Education
_____Less than high school
_____Some high school
_____Completed high school
_____Some College
_____Completed College

8. Primary Drug (select one)
_____Cocaine
_____Crack

Secondary Drug (select one)
_____Cocaine
_____Crack

_____Heroin _____Heroin
_____Marijuana _____Marijuana
_____Alcohol _____Alcohol

9. Were you ever in drug treatment before?
_____Yes
_____No

10. How many times have you been in drug treatment in the past 18 months not including this treatment?_____

11. How long did you stay in your last drug treatment program?_____

12. What kind of program was your last treatment: (select one)
_____Outpatient
_____Drug-free Residential
_____Detox

13. Were you mandated to enter drug treatment?
_____Yes
_____No

14. What kind of criminal justice program mandated you to drug treatment (select one)
_____TASC
_____DTAP
_____Drug Court
_____Parole
_____Probation
_____Other (list name of agency)_____

15. How many times were you arrested within the past 18 months for drugs?_____

16. Did you receive pressure to enter drug treatment?
_____Yes
_____No

17. Were did the pressure come from to enter drug treatment (select one)
_____Legal
_____Family
_____Friends
_____Medical/Health Reasons
_____Welfare System
_____Other (list)_____

Appendix G

Community Resources

For questions regarding the research, you may contact the following:

Valrie Fowler
347-622-3694

Dr. Darrell Wheeler, PhD
129 East 79th Street
New York, NY 10075
212-452-7491

Hunter College IRB
695 Park Avenue
Room E 1426
New York, NY 10021
212-650-3053

For social service programs

VIP Community Services, Inc.
1910 Arthur Avenue
Bronx, NY 10457
718-583-6188

Hope Family Resources
1925 Hone Avenue
Bronx, NY 10461
718-794-1076

Gateway Counseling Center, Inc.
4500 Furman Avenue
Bronx, NY 10470
718-325-5021

New Beginning Community Counseling Center
401 East 147th Street
Bronx, NY 10455
718-402-5250

DEPARTMENT OF HEALTH & HUMAN SERVICES Public Health Service

National Institutes of Health
National Institute on Drug Abuse
Bethesda, Maryland 20892

CONFIDENTIALITY CERTIFICATE NO. DA-09-110

issued to

THE CITY UNIVERSITY OF NEW YORK

conducting research known as

"TREATMENT READINESS AMONG CRIMINAL JUSTICE CLIENTS MANDATED TO DRUG TREATMENT"

In accordance with the provisions of section 301(d) of the Public Health Service Act (42 U.S.C. § 241(d)), this Certificate is issued in response to the request of the Principal Investigator Darrell Wheeler, Ph.D., Associate Dean for Research & Community Partnerships, Hunter College School of Social Work, 129 East 79th Street, New York, NY 10075, to protect the privacy of research subjects by withholding their identities from all persons not connected with this research. Dr. Wheeler is primarily responsible for the conduct of this research.

Under the authority vested in the Secretary of Health and Human Services by section 301(d), all persons who:

1. are enrolled in, employed by, or associated with The City University of New York and its research sites, contractors, or cooperating agencies and

2. have in the course of their employment or association access to information that would identify individuals who are the subjects of the research project known as "Treatment Readiness among Criminal Justice Clients Mandated to Drug Treatment,"

are hereby authorized to protect the privacy of the individuals who are the subjects of that research by withholding their names and other identifying characteristics from all persons not connected with the conduct of that research.

The research began on May 18, 2009 and is expected to end on May 30, 2011.

The purpose of this study is to assess treatment readiness among substance abusing criminal justice clients mandated to drug treatment.

Study subjects' identities are protected by assigning them a unique identifying code. All subject consent forms and collected data are kept in a locked file cabinet. All electronic data are stored on a password protected computer. The research data will be stored for a minimum of three years, after which all materials may be destroyed by a shredding machine. Only aggregate data will be reported in any reports or publications derived from this research and identifying information about subjects will be omitted or disguised.

A Certificate of Confidentiality is needed because sensitive information concerning study subjects' drug use and treatment, and criminal justice involvement, is collected during the course of the study. The Certificate will help researchers avoid involuntary disclosure that could expose subjects or their families to adverse economic, legal, psychological and social consequences.

As provided in section 301(d) of the Public Health Service Act 42 U.S.C. 241(d):

> "Persons so authorized to protect the privacy of such individuals may not be compelled in any Federal, State, or local civil, criminal, administrative, legislative, or other proceedings to identify such individuals."

This Certificate does not protect you from being compelled to make disclosures that: (1) have been consented to in writing by the research subject or the subject's legally authorized representative; (2) are required by the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or regulations issued under that Act; or (3) have been requested from a research project funded by NIH or DHHS by authorized representatives of those agencies for the purpose of audit or program review.

This Certificate does not represent an endorsement of the research project by the Department of Health and Human Services. This Certificate is now in effect and will expire at the end of May 2011. The protection afforded by this Confidentiality Certificate is permanent with respect to any individual who participates as a research subject (i.e., about whom the investigator maintains identifying information) during any time the Certificate is in effect.

Date: 8/21/07

Nora D. Volkow, M.D.
Director

REFERENCES

Abadinksy, H. (1989). *Drug Abuse: An introduction*. Chicago, IL: Nelson-Hall, Inc.

Agosti, V., Nunes, E., & Ocepeck-Welikson, K. (1996). Patient factors related to early attrition from an outpatient cocaine research clinic. *American Journal of Drug and Alcohol Abuse 22*, 29-39.

Akers, R.L. (1991). Social control and public policy on drugs. In *Drugs, alcohol, and society* (pp.15-34). Belmont, CA: Wadsworth Publishing Company.

Akers, R.L. (1991). Drugs, drug effects, and drug behavior. In *Drugs, alcohol, and society* (pp.162-184). Belmont, CA: Wadsworth Publishing Company.

Allard, P. (2002). Life sentences: Denying welfare benefits to women convicted of drug offenses. Retrieved on March 27, 2010 from www.sentencingproject.org/doc/publications/women_lifesentences.pdf

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th edition). Washington, DC: American Psychiatric Association.

Anglin, M.D. (1988). The efficacy of civil commitment in treating narcotic addition. *Journal of Drug Issues 18*, 527-545.

Anglin, M.D., Brecht, M.L., & Maddahian, E. (1989). Pretreatment characteristics and treatment performance of legally coerced versus voluntary methadone maintenance admission. *Criminology 27*, 537-557.

Anglin, M.D. & Hser, T. (1990[a]). Legal coercion and drug treatment: Research findings and social policy implications. In J. Inciadri (Ed.) *Handbook of drug control in the United States* (pp. 151-176). Greenwood Press: New York..

Anglin, M.D. & Hser, T. (1990[b]). Treatment of drug abuse. In M. Tonry and J.W. Wilson (Eds.) *Drug and Crime* Vol. 13 p.393-460. Chicago, IL: The University of Chicago Press.

Anglin, M.D., Longshore, D., & Turner, S. (1999). Treatment alternatives to street crime: An evaluation of five programs. *Criminal Justice and Behavior 26*, 168-195.

Anglin, M.D. & Maugh, T.H. (1992). Ensuring success in interventions with drug-using offenders. *Annals of the American Associations of Political and Social Sciences 521*, 66-90.

Aczel, A. D. & Sounderpandian, J. (2006). *Complete Business Statistics* (6th ed.). New York, NY: McGraw Hill.

Bandura, A. 91997). The anatomy of stages of change. *American Journal of Health Promotion 12*, 8-10.

Beck, A.T., Wright, F.T., Newman, C.F., & Liese, B.S. (1993). *Cognitive Therapy of Drug abuse*. New York, NY: Guildford Press.

Beckman, L.J. (1980). An attributional analysis of alcoholics anonymous. *Journal of Studies on Alcohol 41*, 714-726.

Belding, M.A., Iguchi, M. & Lamb, R.J. (1997). Stages and processes of change as predictors of drug use among methadone maintenance patients. *Experimental and Clinical Psychopharmacology 5*, 65-73.

Belding, M.A., Iguchi, M. & Lamb, R.J. (1996). Stages of change in methadone maintenance: Assessing the convergent validity of two measures. *Psychology of Addictive Behaviors 10, 157-166.*

Belenko, S.R. (1990). The impact of drug offenders on the criminal justice system. In Ralph A. Weisheit (Ed.). *Drug crime and the criminal justice system* (pp. 27-78). Cincinnati, OH: Anderson Publishing.

Belenko, S.R. (1998). Research on drug courts: A critical review. *National Drug Court Institute Review 1*, 1-30.

Belenko, S.R. (2000). *Drugs and drug policy in America: A documentary history*.

Westport, CT: Greenwood Press.

Belenko, S.R. & Dumanovsky, T. (1993). Special drug courts. U.S. Department of Justice, Bureau of Justice Assistance. Washington, DC.

Bonczar, T.P. (2003). Prevalence of imprisonment in the U.S. population, 1974-2001. Bureau of Statistic Justice. Retrieved on September 26, 2009 from www.ojp.usdoj.gov/bjs/pub/pdf/piusp01.pdf

Brecher, E.M. & The Editors of The Consumer Report. (1972). *Licit and Illicit Drugs: The consumer union reports on narcotics, stimulants, depressants, inhalants, hallucinogens, and marijuana--including caffeine, nicotine, and alcohol*. Boston, MA: Little Brown & Company.

Bretch, M., Anglin, M.D., & Dylan, M. (2005). Coerced treatment for methamphetamine abuse: differential patient characteristics and outcomes. *American Journal of Drug and Alcohol Abuse 31*, 337-357.

Brecht, M., Anglin, M.D., & Maddahian, E. (1989). Pretreatment characteristics and treatment performance of legally coerced versus voluntary methadone maintenance admissions. *Criminology* 27, 537-557.

Brecht M., Anglin, M.D, & Wang, J. (1993). Treatment effectiveness for legally coerced versus voluntary methadone maintenance clients. *American Journal of Drug and Alcohol Abuse 19*, 89-106.

Brizer, D.A., Maslansky, R., & Galanter, M. (1990). Treatment retention of patients referred by public assistance to an alcoholism clinic. *American Journal of Drug and Alcohol Abuse 16*, 259-264

Bronfenbrenner, U. (2005). *Making Human Being Human: Bioecological perspective on human development.* Thousand Oaks, CA: Sage Publications, Inc.

Brooklyn District Attorney (2007). Retrieved on December 15, 2007 from www.brooklynda.org/dtap/DTAP

Brown, J.C. (1990). The history of drug control policies in the United States. In James A. Inciardi (Ed.) *Handbook of drug control policies in the United States* (pp. 51-70). New York, NY: Greenwood Press.

Brown, V.B., Melchior, L.A., Panter, A.T., Slaughter, R., & Huba, G.J. (2000). Women's steps of change and entry into drug treatment. A multidimensional stages of change model. *Journal of Drug treatment 18*, 231-240.

Buchanan, D.R. (1992). A social history of American drug use. *Journal of Drug Issues 22*, 31-52.

Bureau of Justice Assistance Drug Court Clearinghouse (2008). Summary of Drug Court activity by state and county. Retrieved on September 19, 2008 from www.spa.american.edu/justice/documents/2150.pdf

Butzin, C.A., Saum, C.A., & Scarpitti, F.R. (2002). Factors associated with completion of a drug treatment court diversion program. *Substance Use and Misuse 37*, 1615-1633.

Cahill, M.A., Adinoff, B., Hosig, H., Muller, K., & Pulliam, C. (2003). Motivation for treatment preceeding and following a drug abuse program. *Addictive Behaviors 28*, 67-79.

Campbell, J. (2009). A brief history of federal mandatory minimum sentencing for federal drug offense. Retrieved on September 5, 2009 from www.newyorkcriminalattorneyblog.com/2009/01/a_brief_history_of_federal_man.html

Carey, K.B., Purnine, D.M., Maisto, S.A., Carey, M.P. (1999). Assessing readiness to change drug abuse: A critical review of instruments. *Clinical Psychology Science and Practice 6*, 245-266.

Caulkins, J.P., Reuter, P., Iguchi, M.Y., & Chiesa J. (2005). How goes the war on drugs: An assessment of U.S. drug problems and policy. Santa Monica, CA: RAND Corporation. Retrieved on July 26, 2008 from www.rand.org/pubs/occasional_papers/2005/RAND_OP121.pdf

Center for Addiction and Drug abuse (1998). Behind bars: Substance and America's prison population. Retrieved on July 25, 2009 from www.casacolumbia.org/absolutenm/articlefiles/379-Behind%20Bars.pdf

Cocaine-cola. Retrieved on November 8, 2009 from http://www.snopes.com/cokelore/cocaine.asp

Cohen, J. (1992a). A power primer. *Psychological Bulletin 112*, 155-159.

Cohen, J. (1992b). Statistical power analysis. *Current Directions in Psychological Science, 1*(3), 98-101.

Cola Marketing History. Retrieved on September 5, 2009 from www.solarnavigator.net/sponsorship/coca_cola.htm

Collins, J.J. & Allison, M.A. (1996). Legal coercion and retention in drug treatment. *Hospital Community Psychiatry 34*, 1145-1149.

Condelli, W.S. & DeLeon, G. (1993). Fixed and dynamic predictors of client treatment in therapeutic communities. *Journal of Drug treatment 10*, 11-16.

Condelli, W.S. & Hubbard, R.L. (1994). Relationship between time spent in treatment and client outcomes from therapeutic communities. *Journal of Drug treatment 11*, 25-33.

Cook, L. F & Weinman, B.A. (1988). Treatment Alternative to Street Crimes. In Carl G. Leukefeld & Frank M. Tims (Eds.) *Compulsory treatment of drug abuse: Research and clinical practice* (pp. 99-105). NIDA Research Monograph 86. Rockville , MD: U.S Government Printing Office.

Coomber, R. (1998). *The control of drugs and drug users: Reason or reaction*. Amsterdam, Netherlands: Harwood Academic Publishers.

Correctional Association of New York (2008). Say no to 35 years of injustice. Correctional Association Policy Paper. Retrieved on September 20, 2008 from www.correctionalassociation.org/publications

Correctional Association of New York (2007). Addressing key criminal justice issues in the 21st century. Correctional Association Policy Paper. Retrieved on October 5, 2008 from www.correctionalassociation.org/publications

Correctional Association of New York (2009[a]). The campaign to repeal the Rockefeller drug laws. Retrieved on December 27, 2010 from www.correctionalassociation.org/publications

Correctional Association of New York (2009[b]). Analysis of Rockefeller drug law reform bill. Retrieved on December 27, 2010 from www.correctionalassociation.org/publications

Cose, E. (1999). The casualties of war. In Hugh T. Wilson (Ed.) *Drugs, Society, and Behavior 15th Edition* (pp. 154). Guilford, CT: Dushkin/McGraw-Hill.

Courtwright, D.T. (2001). *Forces of Habit: Drugs and the making of the modern world*. Cambridge, MA: Harvard University Press.

Courtwright, D.T. (1982). *Dark Paradise: Opiate addiction in America before 1940*. Cambridge, MA: Harvard University Press.

CSAT Treatment Improvement Protocol No. 35. (1999). *Enhancing motivation for change in drug treatment* (DHHS Publication No. (SMA) 99-3354). Washington, DC: U.S. Government Printing Office.

Curry, S.J., Wagner, E.H., & Grothaus, L.C. (1990). Evaluation of intrinsic and extrinsic motivation interventions with a self-help smoking cessation program. *Journal of Consulting and Clinical Psychology 59*, 318-324.

De Leon, G. (1988). Legal pressure in therapeutic communities (p. 160-177). In C.G. Leukefelt & F.M. Tims (Eds.). *Compulsory treatment of drug abuse: Research and clinical practice*. NIDA Research Monograph 86. Rockville, MD: U.S Government Printing Office.

De Leon, G. (1991). Retention in drug-free therapeutic communities. In R.W. Pickens, C.G. Leukefeld, & C.R. Schuster (Eds.). *Compulsory treatment of drug abuse: Research and clinical practice.* NIDA Research Monograph 86. Rockville, MD: U.S Government Printing Office.

De Leon, G. and Jainchill (1986). Circumstance, motivation, readiness, and suitability as correlates of treatment tenure. *Journal of Psychoactive Drug 18*, 203-208.

De Leon, G., Melnick, G. & Kressel, D. (1997). Motivation and readiness for therapeutic community treatment among cocaine and other drug abusers. *American Journal of Drug and Alcohol Abuse 23*, 169-189.

De Leon G., Melnick, G., Kressel, D., & Jainhill, N. (1994). Circumstances, Motivation, Readiness, and Suitability (The CMRS Scale): Predicting retention in therapeutic community treatment. *American Journal of Alcohol Abuse 20*, 495-515.

De Leon, G., Melnick, G., & Tims, F.M. (2001). The role of motivation and readiness in treatment and recovery. In F.M. Tims, C.G. Leukefeld, & J.J. Platt (Eds.) *Relapse and Recovery in Addictions* (pp. 143-171). New Haven, NY: Yale University Press.

De Leon G., Melnick, G., Thomas, G., Kressel, D., & Wexler, H.K. (2000). Motivation for treatment in a prison-based therapeutic community. *American Journal of Drug and Alcohol Abuse 26*, 33-46.

DiClemente, C.C. (2003). Addiction and Change: How addictions develop and addicted people recover. New York, NY: Guildford Press.

DiClemente, C.C. (1999). Motivation for change: Implications for substance treatment. *Psychological Bulletin 10*, 209-213.

DiClemente, C.C (1991). Motivational interviewing and the stages of change (pp. 1919-202). In William R. Miller and Stephen Rollnick (Eds.) *Motivational Interviewing: Preparing people to change addictive behaviors*. New York, NY: Guilford Press.

DiClemente, C.C., Bellino, L. E., & Neavins, T.M. (1999). Motivation for change and alcoholism treatment. *Alcohol Research and Health, 23*, 86-92.

DiClemente, C.C., Carbonari, J.P., & Velasquez, M.M. (1992). Alcoholism treatment mismatching from a process of change perspective. In R.R. Watson (Ed.) *Treatment of Drug and Alcohol Abuse* (pp. 115-142). Totowa, NJ: Humana Press.

DiClemente, C.C. & Hughes, S.O. (1990). Stages of change profile in outpatient alcoholism treatment.*Journal of Drug abuse, 2*, 217-235.

DiClemente, C.C. & Prochaska, J.O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. In W.R. Miller and N. Heather (Eds.) *Treating Addictive Behaviors* (pp. 3-24). New York, NY: Plenum Press.

DiClemente, C.C., Prochaska, J.O., Fairhurst, S., Velicer, W.F., Velasquez, M., & Rossi, J. (1991). The process of smoking cessation: An analysis of precontemplation, contemplation, and preparation. *Journal of Consulting and Clinical Psychology, 59*, 295-304.

DiClemente, C.C., Schlundt, B.S., & Gemmell, L. (2004). Readiness and stages of change in addiction treatment. *American Journal on Addictions 13*, 103-199.

Ditton, P.M., & Wilson, D.J. (1999). Truth in sentencing in state prisons. Bureau of Justice Statistics. Retrieved on September 27, 2009 from www.ojp.usdoj.gov/bjs/pub/pdf/tssp.pdf

Dole, V.P. & Nyswander, M.E. (1980). Methadone maintenance: A theoretical perspective (pp. 256-261). In Dan J. Lettieri, Mollied Sayers, & Helen Wallenstein Pearson (Eds.) *Theories on drug abuse: Selected contemporary perspectives*. NIDA Research Monograph 30. Rockville, MD: U.S. Government Printing Office

Drop the Rock www.droptherock.org retrieved on September 1, 2008.

Drug Policy Alliance (2009[a]). Crack/cocaine sentencing disparity. Retrieved on July 27, 2007 from www.drugpolicy.org/drugwar/mandatorymin/crackpowder.cfm

Drug Policy Alliance (2009[b]). New York's Rockefeller Drug Laws: Explaining the reforms of 2009. Retrieved on March 27, 2010 from

www.drugpolicy.org/docUploads/Explaining_the_RDL_reforms_of_2009_FINAL.pdf

Drug and Alcohol Services Information System (2004). Drug treatment admissions referred by the criminal justice system: 2002. Retrieved on February 15, 2006 from www.oas.samhsa.gov

Dynia, P. & Sung, H. (2000). The safety and effectiveness of diverting felony drug offenders to residential treatment as measured by recidivism. *Criminal Justice Policy Review 11*, 299-311.

Etheridge, R.M., Craddock, S. G., Hubbard, R.L., & Rounds-Bryant, J.L. (1999). The relationship of counseling and self-help participants to patient outcomes in DATOS. *Drug and Alcohol Dependence 57,* 99-112.

Farabee, D. & Leukefeld, C.G. (2001). Recovery and the criminal justice system. In F.M. Tims, C.G. Leukefeld, & J.J. Platt (Eds.) *Relapse and Recovery in Addictions* (pp. 40-59). New Haven, NY: Yale University Press.

Farabee, D. Nelson, R. & Spence, R. (1993). Psychological profiles of criminal justice and non-criminal justice referred to drug treatment. *Criminal Justice and Behavior 20*, 336-346.

Farabee D., Simpson, D.D., Dansereau, D., & Knight, K. (1995). Cognitive inductions into treatment among drug users on probation. *Journal of Drug Issues 25*, 669-682.

Fernandez, A.C., Begley, E.A., & Marlatt, G.A. (2006). Family and peer interventions for adults: Past approaches and future directions. *Psychology of Addictive Behaviors 20*, 207-213.

Friedman, A.S., Tomko, L.A., and Utada, A. (1991). Client and family characteristics that predict better family therapy outcome for adolescent drug abusers. *Family Dynamics Addict Quarterly 1*, 77-93.

Gahlinger, P.M. (2004). *Illegal Drugs: A complete guide to their history, chemistry, use, and abuse.* New York, NY: Plume.

Gaines, L.K. & Kraska, P.B. (2003). *Drugs, crimes, and justice: Contemporary*

perspective. Prospect Heights, IL: Waveland Press, Inc.

Gibney, W. & Davidson, T. (2010). Drug law resentencing: Saving tax dollars with minimal community risks. The Legal Aid Society Criminal Practice. Retrieved on December 27, 2010 from http://www.legal-aid.org/media/127984/drug-law-reform-paper-2009.pdf

Gieringer, D. (2004). The Opium Exclusion Act of 1909. Retrieved on December 5, 2009 from http://www.counterpunch.org/gieringer02062009.html

Goode, E. (1999). *Drugs in American Society* (5th Ed). New York, NY: McGraw-Hill, Inc.

Gostin, L.O. (1991). Compulsory treatment for drug dependent persons: Justifications for public health approach to drug dependency. *The Milbank Quarterly 69*, 561-593.

Governor David A. Paterson Press Releases (2009). Governor Paterson signs Rockefeller drug reform into law. Retrieved on April 24, 2009 from http://www.ny.gov/governor/press/press_0424091.html

Gregorie, T.K. & Burke, A.C. (2004). The relationship of legal coercion to readiness to change among adults with alcohol and other drug problems. *Journal of Drug treatment 26*, 35-41.

Harrison, L.D. (2001). The revolving prison door for drug-involved offenders: Challenges and opportunities. *Crime and Delinquency 47*, 462-484.

Hartman, D.J., Wolk, J.L., Johnston, J.S., and Colyer, C.J. (1997). Recidivism and drug abuse outcomes in a prison-based therapeutic community. *Federal Probation 61*, 18-25.

Harwood, H.J., Fountain, D., & Livermore, G. (1999). Cost estimates for alcohol and drug abuse. *Addiction 94*, 631-647.

Harwood, H.J., Hubbard, Collins, J.J., & Rachal, J.V. (1988). The cost of crime and the benefits of drug treatment: A cost-benefit analysis using TOPS data (pp. 209-235). In Carl G. Leukelfd & Frank M. Tims (Eds.) *Compulsory Treatment of*

Drug abuse: Research and clinical practice. NIDA Research Monograph 86. Rockville, MD: U.S. Government Printing Office.

Harvard Law Review (1998). Developments in the law: Alternatives to incarceration. *Harvard Law Review 111*, 1863-1990.

Hiller, M.L. Knight, K., Broome, K.M., & Simpson, D.D. (1998). Legal pressure and treatment retention in a national sample of long-term residential treatment programs. *Criminal Justice and Behavior 25*, 463-481.

Hiller, M.L., Knight, K., Leukefeld, C., & Simpson, D.D. (2002). Motivation as predictor of therapeutic engagement in mandated residential drug treatment. *Criminal Justice and Behavior 29*, 56-75.

Howell, D. C. (1992). *Statistical methods for psychology* (7th ed.). Belmont, CA: Wadsworth Cengage Learning.

Howell, K. & Day, A. (2003). Readiness for anger management: Clinical and theoretical issues. *Clinical Psychology Review 23*, 319-337.

Hubbard, R.L., Collins, J.J., Rachal, J.V., & Cavanaugh, E.R. (1988). The criminal justice client in drug treatment. In Carl G. Leukefeld & Frank M. Tims (Eds.) *Compulsory treatment of drug abuse: Research and clinical practice* (pp. 57-80). NIDA Research Monograph 86. Rockville, MD: U.S. Government Printing Office.

Human Rights Watch (1997). Cruel and unusual: Disproportionate sentences for New York drug offenders. Retrieved on September 5, 2009 from www.hrw.org/legacy/reports/1997/usny/

Hynes, C. & Swern, A.J. (2005). Drug Treatment Alternative to Prison: Fourteen annual report. New York: King County District Attorney's Office.

Inciardi, J.A. (1996). The therapeutic community: An effective model for corrections-based drug treatment (pp.65-74). In Kevin E. Early (Ed.) *Drug Treatment Behind*

Bars: Prison-based Strategies for Change. Westport, CT: Greenwood Publishing Group, Inc.

Inciardi, J.A. & McBride, D.C. (1991). *Treatment Alternatives to Street Crime: History, Experiences and Issues*. Rockville, MD: National Institute of Drug Abuse.

Inciardi, J. A. & McElrath, K. (2001). *The American drug scene: An anthology* (pp. xv). Los Angles, CA: Roxbury Publishing Company.

Inciardi, J.A. & Surratt, H.L. (2001). African Americans, crack, and crime (pp. 194-204). In James A. Inciardi and Karen McElrath (Eds.) *The American drug scene: An anthology*. Los Angles, CA: Roxbury Publishing Company.

Jacobs, J.B. & Zimmer, L. (1991). Drug treatment and workplace drug testing: Politics, symbolism and organizational dilemmas. *Behavioral Science and the Law 9,* 345-360.

Jensen, E.L. & Gerber, J. (1998). The social construction of drug problems: An historical overview (pp. 1-24). In Eric L. Jensen and Jurg Gerber (Eds.) *The New War on Drugs: Symbolic and Criminal Justice Policy*. Cincinnati, OH: Anderson Publishing Company.

Joe, G.W., Simpson, D.D., & Broome K.M. (1998). Effects of readiness for drug treatment on client retention and assessment of process. *Addiction 93*, 1177-1190.

Kandall, S.R. (2001). Women and addiction in the United States 1850-1920. Rockville, MD; NIDA Research Monograph. Rockville, MD: US Government Printing Office.

Karberg, J.C. & James, D.J. (2005). Substance dependence, abuses, and treatment of jailed inmates, 2002. *Bureau of Justice Statistics Special Report*. U.S. Department of Justice Office Program, NCJ 209588.

Kelly, J.F., Finney, J.W., & Moos, R. (2005). Substance use disorder patients who are mandated to treatment: Characteristics, treatment process, and 1- and 5- year outcomes. *Journal of Drug treatment 28*, 213-223.

King, R.S. (2007). Changing directions? State sentencing reforms 2004-2006. Retrieved on March 27, 2010 from www.sentencingproject.org/doc/publications/sentencingreformforweb.pdf

King, R.S. (2008). Disparity by geography: The war on drugs in America's cities. Retrieved on September 25, 2009 from www.sentencingproject.org/doc/publications/dp_drugarrestreport.pdf

King, R.S. & Mauer, M. (2002). State sentencing and corrections policy in an era of fiscal restraint. Retrieved on March 27, 2010 from www.sentencingproject.org/detail/publication.cfm?publication_id=158

Knight, K., Hiller, M.L., Broome, K.M., & Simpson, D.D. (2000). Legal pressure, treatment readiness, and engagement in long-term residential programs. *Journal of Offender Rehabilitation 31*, 101-115.

Kraft, P., Sutton, S.R., Reynolds, H.McC. (1999). The transtheorectical model of behavior change: Are the stages qualitatively different? *Psychology and Health 14*, 433-450.

Kramer, M. (1993). The political interest Clinton's drug policy is a bust. Retrieved on November 16, 2007 from www.time.com/magazine/article/0,9171,979873,00.html

Lang, M.A. & Belenko, S. (2000). Predicting retention in a residential *drug* treatment alterative to prison program. *Journal of Drug treatment 19*, 145-160.

Langan, P.A. & Levin, D.J. (2002). Recidivism of prisoners released 1994. *Bureau of Justice Statistics*. Washington, DC: US Department of Justice. Retrieved on September 19, 2008 from www.ojp.usdoj.gov

Leshner, A.I. (2005). Addiction is a brain disease (pp. 68-77). In Tamara L. Roleff (Ed.) *Drug abuse: Opposing viewpoints*. Farmington Hills, MI: Greenhaven Press.

Leukefeld, G.G. & Tims, F.M. (1988). An introduction to compulsory treatment for drug abuse: Research and clinical practice. In Carl G. Leukefeld & Frank M. Tims (Eds.) *Compulsory Treatment of Drug abuse: Research and clinical practice*.

NIDA Research Monograph 86. Rockville,MD: U.S. Government Printing Office.

Lewis, M. A. & Noguchi, E. (2008). Logistic regression to describe how the relationship between social connection and self-rated health varies by gender. *Journal of Applied Quantitative Methods 19*, 166-174.

Lincourt, P., Kuettel, T.J., & Bombardier, C.H. (2002). Motivational interviewing in a group setting with mandated clients: A pilot study. *Addictive Behaviors 27*, 381-391.

Lipsey, M.W. (1990). *Design Sensitivity: Statistical Power for Experimental Research.* Newbury Park, CA: SAGE.

Lipton, D.S. (1998). Therapeutic communities: History, effectiveness and prospects. *Corrections Today*, 106-109.

Lipton, D.S. (1996). Prison-based therapeutic communities: Their success with drug-abusing offenders. *National Institute of Justice Journal 230*, 12-20.

Littell, J.H. & Girvin, H. (2004). Ready or not: Uses of the stages of change model in child welfare. *Child Welfare*, 341-366.

Littell, J.H. & Girvin, H. (2002). Stages of change: A critique. *Behavior Modification 26*, 223-273.

Loneck, B., Garrett, J.A., & Banks, S.M. (1996). A comparison of the Johnson Intervention with four other methods of referral to outpatient treatment. *Journal of Drug and Alcohol Abuse 22*, 233-247.

Longshore, D. & Teruya, C. (2006). Treatment motivation in drug users: A theory-based analysis. *Drug and Alcohol Dependence 81*, 179-188.

Lurigio, A.J. (2000). Drug treatment availability and effectiveness: Studies of general and criminal justice populations. *Criminal Justice and Behavior 27*, 495-528.

Maddux, J.F. (1988). Clinical experience with civil commitment (pp. 35-36). In Carl G. Leukefeld & Frank M. Tims (Eds.). *Compulsory Treatment of Drug abuse: Research and clinical practice*. NIDA Research Monograph 86. Rockville, MD. U.S. Government Printing Office.

Marlowe, D.B. (2003). Integrating drug treatment and criminal justice supervision. *Science and Practice Perspectives August*, 4-14.

Marlowe, D.B., Kirby, K.C., Bonieskie, L.M., Glass, D.J., Dodds, L.D., Husband, S.D., Platt, J.J., & Festinger, D.S. (1996). Assessment of coercive and noncoercive pressures to enter drug treatment. *Drug and Alcohol Dependence 42*, 77-84.

Marlowe, D.B., Kirby, K.C., Merikle, E.P., Festinger, D.S., and McLellan, A.T. (2001). Multidimensional assessment of perceived treatment-entry pressures among drug abusers. *Psychology of Addictive Behaviors 15*, 97-108.

Marshall, G.N. & Hser, Y. (2002). Characteristics of criminal justice and non-criminal justice clients receiving treatment for drug abuse. *Addictive Behaviors 27*, 179-192.

Maxwell, S.R. (2000). Sanctions threats in court-ordered programs: Examining their effects on offenders mandated into drug treatment. *Crime & Delinquency 46*, 542-563.

Mauer, M. (2003). Invisible punishment: Block housing, education, voting. *Joint Center for Political and Economic Studies*, May/June 2003. Retrieved on March 21, 2010 from www.sentencingproject.org/doc/publications/cc_mauer-focus.pdf

Mauer, M. & King, R.S. (2007[a]). A 25-year quagmire: The war on drugs and its impact on American society. Retrieved on July 17, 2009 from www.sentencingproject.org/doc/publications/dp_25yearquagmire.pdf

Mauer, M. & Kings, R.S. (2007[b]). Uneven justice: State rate of incarceration by race and ethnicity. Retrieved on July 17, 2009 from www.sentencingproject.org/doc/publications/rd_stateratesofincbyraceandethnicity.pdf

Melnick, G., De Leon G., Thomas, G., Kressel, D., & Wexler, H.K. (2001). Treatment process in prison therapeutic communities: Motivation, participation, and outcome. *American Journal of Drug and Alcohol Abuse 27*, 633-650.

McVay, D., Schiraldi, V., & Ziedenberg, J. (2004). Treatment or incarceration? National and state findings on the efficacy and cost savings of drug treatment versus imprisonment. Justice Policy Institute. Retrieved on July 26, 2008 from www.justicepolicy.org

Miller, W.R. (1985). Motivation for treatment: A review with special emphasis on alcoholism. *Psychological Bulletin 98*, 84-107.

Miller, W.R. & Rollnick, S. (2002). *Motivational Interviewing: Preparing people of change*. 2nd Ed. New York, NY: Guilford Press.

Miller, W.R. & Tonigan, J.S. (1996). Assessing drinkers' motivations for change: The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). *Psychology of Addictive Behaviors, 10*, 81-89.

Morgan, H.W. (1974). *Yesterday's Addicts: American society and drug abuse 1865-1920*. Norman, OK: University of Oklahoma Press.

Morgan, H.W. (1981). *Drugs in America: A social history 1800-1980*. Syracuse, NY: Syracuse University Press.

Mueller, M.D. & Wyman, J.R (1997). Study sheds new light on state of drug treatment nation wide. NIDA Notes vol.12 no.15. Retrieved on October 10, 2008 from www.drugabuse.gov/NIDA_Notes/NNVol12N15/Study.html

Mullen, R. (1996). Therapeutic communities in prison: Dealing with toxic waste (pp. 45-64). In Kevin E. Early (Ed.) *Drug treatment behind bars: Prison-based strategies for change*. Westport, CT: Greenwood Publishing Group, Inc.

Musto, D. (1991). Opium cocaine, and marijuana in America history. *Scientific American*, 40-47.

Musto, D. (1999). *The American disease: Origin of narcotic control* (3rd ed). New York, NY: Oxford University Press.

National Association of Drug Court Professionals (1997). Defining drug courts: The key components. Office of Justice Programs, US Department of Justice.

National Center on Addiction and Drug abuse (2003). Drug Treatment Alternative-to-Prison (DTAP) Program: An evaluation by the National Center on Addiction and Drug abuse. *Pennsylvania Department of Correction* March 14, 2003. Retrieved on September 20, 2008 from www.cor.state.pa.us/stats/lib/stats/DTAP.pdf

National Center on Addiction and Drug abuse (1998). Behind bars: Drug abuse and America's prison population. Retrieved from www.casa.org/publications on October 1, 2008.

National Institute on Drug abuse Research Report Series (2002). Therapeutic communities. Retrieved on October 15, 2007 from www.drugabuse.gov/ReseachReports/Therapetutic

National Institute on Drug abuse Research Report Series (1992). Extent and adequacy of insurance coverage for drug abuse service. Retrieved on October 10, 2008 from www.drugabuse.gov/Research Reports

National Institute on Drug abuse Research (2000). Principles of drug treatment: A research-base guide. Retrieved on December 15, 2007 www.drugabuse.gov/pubcat

National Institute on Drug abuse (2006). Principles of drug treatment for criminal justice population: A research-based guide. Retrieved on March 26, 2009 www.nida.nih.gov/pubcat

National Institute of Justice (2006). Drug Courts: The second decade. Retrieved on October 15, 2007 from www.ojp.usdoj.gov/nij

New York Civil Liberties Union (2009). The Rockefeller Drug Laws: Unjust, irrational, ineffective. Retrieved on January 11, 2011 from www.nyclu.org/files/Rock.pdf

Nielsen, A.L. & Scarpitti, F.R. (2002). Predicting retention in a therapeutic community for incarcerated drug abusers. *Journal of Offender Rehabilitation 34*, 47-65.

Nielsen, A.L., Scarpitti, F.R., & Inciardi, J.A. (1996). Integrating the therapeutic community and work release for drug-involved offenders: The CREST program. *Journal of Drug treatment 13*, 349-358.

O'Hare T. (1996). Court-ordered versus voluntary clients: Problem differences and readiness for change. *Social Work 41*, 417-422.

Office of the Attorney General (1999). The New York City Police Department's "Stop and Frisk" Practices (pp.1). Retrieved on September 25, 2009 from www.oag.state.ny.us/bureaus/civil_rights/pdfs/stp_frsk.pdf

Office of National Drug Control Policy (2009). Making the drug problem smaller. Retrieved on April 27, 2009 from www.whitehousedrugpolicy.gov/publications/pdf/mdpsmaller09.pdf

Office of National Drug Control Policy (2004). The economic cost of drug abuse in the United States 1992-2002. Retrieved on June 30, 2008 from www.whitehousedrugpolicy.gov/publications/pdf/economic_costs98.pdf

Otto, S. (1995). *War on Drugs/War on People: A resource book for the debate*. Las Colinas, TX: Ide House.

Ounpuu, S., Woolcott, D.M., & Greene, W. (2000). Defining stages of change for lower-fat eating. *Journal of American Diet Association 100*, 674-679.

Pagano, R. R. (2010). *Understanding statistics in the behavioral sciences* (9th ed.). Belmont CA: Wadsworth Cengage Learning.

Payne, M. (1997). Modern Social Work Theory 2nd Edition. Chicago, IL: Lyceum Books, Inc.

Perron, B.E. & Bright, C.L. (2008). The influence of legal coercion on dropout from drug treatment: Results from a national survey. *Drug and Alcohol Dependence 92,* 123-131.

Peters, R.H. & Murrin, M.R. (2000). Effectiveness of treatmement-based drug courts in reducing criminal recidivism. *Criminal Justice and Behavior 27*, 72-96.

Platt, J.J., Buhringer, G., Kaplan, C.D., Brown, B.S., & Taube, D.O. (1988). The prospects and limitations of compulsory treatment for drug addiction. *Journal of Drug Issues 18*, 505-525.

Polcin, D.L. (2001). Drug and alcohol offenders coerced into treatment: A review of modalities and suggestions for research on social model programs. *Substance Use and Misuse 36*, 589-608.

Prochaska J.O. & DiClemente (1982). Transtheoretical therapy: Towards a more integrative model of change. *Psychotherapy 19*, 276-278.

Prochaska, J.O., DiClemente, C.C., & Norcross, J.C. (1992). In search of how people change: Application to addictive behaviors. *American Psychologist 47*, 1102-1114.

Prochaska, J.O., Redding, C.A., Harrlow, L.L., Rossi, J.S., & Velicer, W.F. (1994). The transtheoretical model of change and HIV prevention: A review. *Health Education and Behavior 21*, 471-486.

Prochaska, J.O., Velicer, W.F., DiClemente, C.C., & Fava, J. (1988). Measuring processes of change: Applications to the cessation of smoking. *Journal of Consulting and Clinical Psychology 56*, 520-528.

Rempel, M. & DeStefano, D. (2001). Predictors of engagement in court-mandated treatment: Finding at the Brooklyn Treatment Court, 1996-2000. *Drug Courts in Operation: Current Research* 87-127.

Saari, S. (2006). Productivity: Theory and measurement in business. www.mido.fi/index_tiedostot/Productivity_EPC2006_Saari.pdf

Schuckit, M.A. (1980). A theory of alcohol and drug abuse: A genetic approach (pp. 297-302). In Dan J. Lettieri, Mollied Sayers, & Helen Wallenstein Pearson (Eds.) *Theories on drug abuse: Selected contemporary perspectives*. NIDA Research Monograph 30. Rockville, MD: U.S. Government Printing Office.

Sechrest, D.K. (2003). Drug courts: What is their future. In Larry K. Gaines & Peter b. Kraska (Eds.). *Drugs, crime, and justice* (pp. 318-331). Prospect Heights, IL: Waveland Press.

Sentencing Project (2009[a]). Federal crack cocaine sentencing. Retrieved on July 17, 2009 from www.sentencingproject.org/doc/dp_crack_sentencing.pdf

Sentencing Project (2009[b]). Reducing racial disparity in the criminal justice system: A manual for practitioners and policy makers. Retrieved on July 17, 2009 from www.sentencingproject.org/doc/publications/inc_noexit.pdf

Sentencing Project (2009[c]). Criminal justice primer: Policy priorities for the 111th Congress. Retrieved on March 26, 2010 from www.sentencingproject.org/doc/publications/cjprimer2009.pdf

Sia, T.L., Dansereau, D.F., & Czuchry, M.L. (2000). Treatment readiness training and probationers' evaluation of drug treatment in a criminal justice setting. *Journal of Drug treatment 19*, 459-467

Sims, B. & Du-Pont Morales, M.A. (2004). Restrictive intermediate punishment programming: A community-based treatment program for substance-addicted correctional clients. In Barbara Sims (Ed.) *Drug treatment with correctional clients: Practical implications for institutional and community settings* (pp. 175-194). Binghamton, NY: Haworth Press, Inc.

Simpson, D.D., Joe, G.W., & Brown, B.S. (1997). Treatment retention and follow-up outcomes in the Drug treatment Outcome Study (DATOS). *Psychology of Addictive Behaviors 11*, 279-293.

Simpson, D.D., Joe, G.W., Fletcher, B.W., Hubbard, R.L., & Anglin, M.D. (1999). A national evaluation of treatment outcomes for cocaine dependence. *Archives of General Psychiatry 56*, 5-7-515.

Smith, K.J., Subich, L.M., Kalodner, C. (1995). The Transtheoretical model's stages and process of change and their relation to premature termination. *Journal of Counseling Psychology 42*, 34-39.

Soyez, V., De Leon, G., Rosseel, Y., and Broekaert, E. (2006). Motivation and readiness for therapeutic community treatment: Psychometric evaluation of the Dutch translation of the Circumstance, Motivation, Readiness, and Suitability scales. *Journal of Drug treatment 30*, 297-308.

Stevens, J. P. (2009). *Applied multivariate statistics for the social sciences* (5th ed.). Routledge Academic: Mahwah, NJ.

Drug abuse Mental Health Services Administration (2000). Drug treatment in adult and juvenile correctional facilities. Retrieved on October 10, 2008 from www.samhsa.gov/csat/csat.htm

Sung, H.E., Belenko, S., Feng, L., & Tabachnick, C. (2004). Predicting treatment compliance among criminal justice-mandated clients: A theoretical and empirical exploration. *Journal of Drug treatment 26*, 13-26.

Sutton, S. (2001). Back to the drawing board? A review of applications of the transtheoretical model to substance use. *Addiction 96*, 175-186.

Swern, A.J, (2007). Drug Treatment Alternative to Prison Sixteenth Annual Report. Retrieved on September 19, 2008 from www.brooklynda.org/dtap

Tabachnick, B. G. & Fidell, L. S. (2006). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn and Bacon.

Thom, B. (1987). Sex differences in help-seeking for alcohol problems—2. Entry into treatment. *British Journal of Addiction 82*, 989-997.

Tims, F.M., Lueukefeld, C.G., & Platt, J.J. (2001). Relapse and Recover. In F.M. Tims, C.G. Leukefeld, & J.J. Platt (Eds.) *Relapse and Recovery in Addictions* (pp. 3-17). New Haven, NY: Yale University Press.

Treatment Accountability for Safer Communities (n.d.). TASC in the 21st century: A guide for practitioners and policy makers. Retrieved on September 30, 2007 from http://www.nationaltasc.org/reso/tasc_in_21st.pdf

Tung, W. & Gillet, P.A. (2004). Stages of change for physical activities among caregivers. *Journal of Advance Nursing 49*, 513-521.

U.S. Department of Justice (2005). Crime in the United States. Retrieved November 17, 2007 from https://www.fbi.gov/ucr/05cius

U.S. Government Accountability Office (2005). Adult Drug Courts: Evidence indicates recidivism reductions and mixed results for other outcomes. Retrieved November 11, 2007 from https://www.gao.gov

Wallace, B.C. (2005). Mandated addiction treatment. In *Making mandated addiction treatment work* (pp. 10). Lanham, MD: Rowman & Littlefield Publishers, Inc.

Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and Violent Behavior 9*, 645-673.

Ward, E.S. & Hemsely, D.R. (1981). Social and psychosocial factors associated with length of stay on an inpatient drug dependency treatment unit. *The International Journal of the Addictions 16*, 1281-1288.

Watkins, K.E. & Podus, D. (2000). The impact of terminating disability benefits for drug abusers on substance use and treatment participation. *Psychiatric Services 51,* 1371-1381.

Weiner, R.I. (1976). Shifting perspective in drug-abuse policy. *Crime and Delinquency 22,* 347-358.

Wexler, H.K., William, R.A., Early K.E., & Trotman, C.D. (1996). Prison treatment for drug abusers: Stay 'N Out revisited. In Kevin E. Early (Ed.) *Drug Treatment Behind Bars: Prison-based Strategies for Change* (pp. 101-131). Westport, CT: Greenwood Publishing Group, Inc.

Wild, T.C. (2006). Social control and coercion in addiction treatment: Towards evidence-based policy and practice. *Addiction 101*, 40-49.

Wild, T.C., Newton-Taylor, B., & Alletto, R. (1998). Perceived coercion among client entering drug treatment: Structural and psychological determinants. *Addictive Behaviors 23*, 81-95.

Wild, T.C., Newton-Taylor, B., Ogborne, A.C., Mann, R., Erickson, P., & MacDonald, S. (2001). Attitudes toward compulsory drug treatment: a comparison of the public, counselors, probationers and judges' views. *Drug: Education, Prevention and Policy 8*, 33-45.

Wild, T.C., Roberts, A.B., & Cooper, E.L. (2002). Compulsory drug treatment: An overview of recent findings and issues. *European Addiction Research 8*, 8-93.

Willoughby, F.W. & Edens, J.F. (1996). Construct validity and predictive utility of the stages of change scale for alcoholics. *Journal of Drug abuse*, *8*, 275-291.

Woodiwiss, M. (1998). Reform, racism, and rackets: Alcohol and drug prohibition in the United States. In R. Coomber (Ed.) *The Control of Drugs and Drug Users: Reason or Reaction* (pp.13-30). Amsterdam, Netherlands: Harwood Academic Publishers.

Young, D. (2002). Impact of perceived legal pressure on retention in drug treatment. *Criminal Justice and Behavior 29*, 27-55.

Young, D. & Belenko, S. (2002). Program retention and perceived coercion in three models of mandatory drug treatment. *Journal of Drug Issues 32*, 297-328.

Zarkin, G.A., Dunlap, L.J., Bray, J.W., & Wechsberg, W.M. (2002). The effect of treatment completion and length of stay on employment and crime in outpatient drug-free treatment. *Journal of Drug treatment 23*, 261-271.